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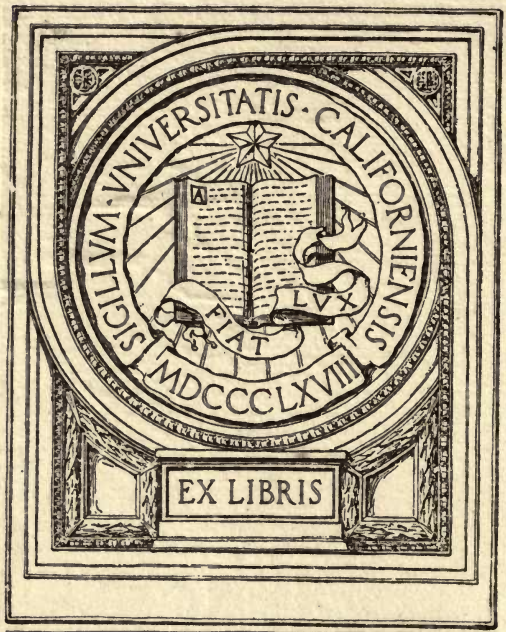
WILD WINGS

BY HERBERT K. JOB



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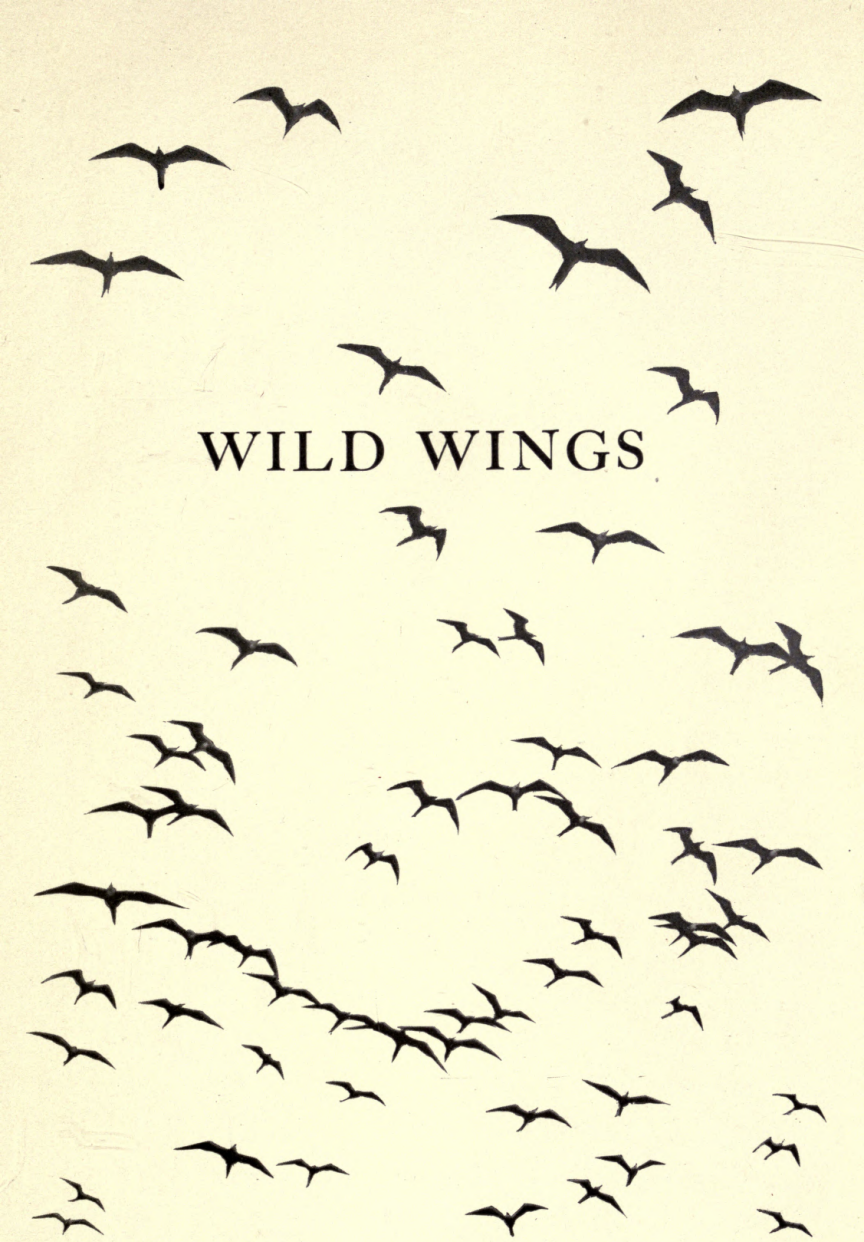

WILD WINGS

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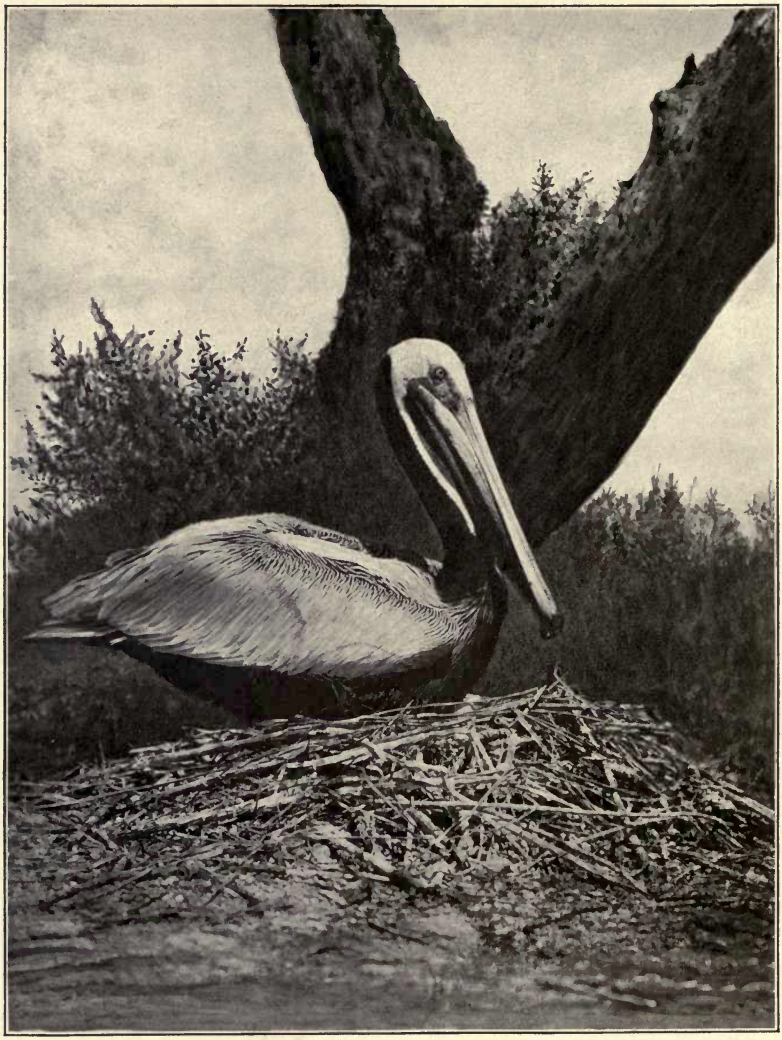

"I'M ALL READY NOW"

WILD WINGS

Adventures of a Camera-Hunter among the larger Wild Birds of North America on Sea and Land

BY

HERBERT KEIGHTLEY JOB

Author of "Among the Water-Fowl,"
Member of The American Ornithologists' Union, etc.

WITH AN INTRODUCTORY LETTER
BY THEODORE ROOSEVELT

WITH ONE HUNDRED AND SIXTY ILLUSTRATIONS AFTER PHOTOGRAPHS FROM LIFE BY THE AUTHOR

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Published May 1905

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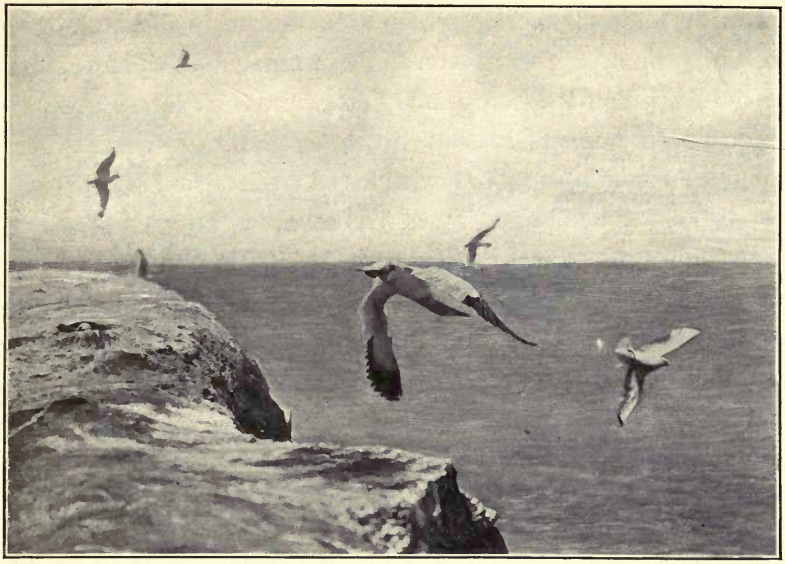
To my Mother

IN LOVING RECOGNITION OF HER MANY
ANXIETIES FOR A ROVING NATURALIST

I dedicate this volume



KITTIWAKES AND A GANNET, NORTH BIRD ROCK
"STRONG WINGS MAKE THEM MASTERS OF THE ELEMENTS"

PREFACE

THE above picture may serve to suggest the feelings which have animated me in securing the contents of this volume, of enthusiastic love of the out-door world and keen delight in its free, wild life, — a spirit which I hope may not have been too fugitive to bear the transfer from nature to the printed page. It is a scene instinct with life. Forth from the wave-lashed cliff and out over the heaving, restless deep fly the wild, hardy birds of the sea. As they launch into the cold breeze which sweeps over the lonely northern ocean and wheel off before it with careless abandon,

uttering their shrill cries, which are softened in the undertone of the surf, strong wings make them masters of the elements. How I thrill as I watch them! They and their lone surroundings are the unsullied handiwork of God. No trace is here of man's vandalism; the wildness of the scene might well have been matched at Creation's dawn.

I cannot adequately explain the fascination which the wild birds have for me, and, in these days, for an increasing multitude of people. Is it their flight, so mysterious even yet to us, their grace and beauty, their fulness of abounding life, the interest of their nesting, the charm of their varied surroundings, the exhilaration of the quest which lures us forth into the open? It is all these and more, and fortunate are they who feel the thrill of enthusiasm for nature and in nature, be the special interest birds or whatsoever it may. In this age of strain and stress some pleasant incentive is needed to drive us from our toil and give the exercise in the pure open air which is absolutely essential to health and vigor. Added years and serenity of soul are the reward.

Of all the various out-door recreations which I have tried, when it comes to genuine, exciting sport, give me *hunting with the camera*. In past years I have tried shooting and collecting, but this new hunting entirely outclasses them. It requires more skill than shooting, and hence is a finer sport. The results are of more interest and value, and, withal, the lives of the wild creatures are spared for our further pleasure. This hunting is in season the year round, every living thing is proper "game," and the sport may be enjoyed by men and women alike. One may use both gun and camera, if desired.

In my own case, at first both were used, but, finding camera-hunting the more interesting and exciting, I gradually lost the inclination to shoot. Of course it is far better to perform the whole photographic process one's self. This is part of the sport, and is a delightful amusement for days or evenings at home. The excitement of developing a plate which records a hard-earned shot is almost as great as in making the shot itself.

If I am asked to advise upon the choice of a camera, I recommend the size which employs a 4 x 5-inch plate. The beginner had better secure a lightly built focusing instrument, of any reputable make, a model sometimes known as "cycle style," having a draw of bellows, for this size, of at least sixteen inches. A good, yet inexpensive rapid rectilinear doublet lens will suffice, one which covers the *whole* plate sharply. The lens designed for the next larger size of plate is preferable, as it secures a larger image of the game at a given distance. After mastering the rudiments, if one then decide to follow up the sport, it will be time enough to secure a camera of the "reflex" or reflecting type, with its ingenious mirror arrangement, the swift focal-plane shutter, and a rapid lens. This fine battery is adapted to photographing birds in flight, and the like, but is at present, unfortunately, expensive. As to the actual using of these cameras and their accessories, I have tried to make brief suggestions by concrete cases through the pages which follow. Various treatises upon the subject by others make it unnecessary for me here to attempt detailed and technical explanations.

On the principal outing trips, hereafter described, I have been happy in my companions. Usually these were C. S. Day, of Boston, and A. C. Bent, of Taunton, Massachusetts, and occasionally Dr. L. B. Bishop, of New Haven, Connecticut, or Dr. E. E. Murphey, of Augusta, Georgia. All are fellow members with me of the American Ornithologists' Union. They are familiar with all my methods, and have shared with me the excitement of the taking of many of my most successful pictures. The presence of responsible witnesses in hunting with the camera is not unimportant in these days, when the recognized value of successful camera-shots leads so many of the unscrupulous to attempt short cuts to success that there is often need of careful scrutiny to distinguish the tares from the wheat.

Most of the following chapters have been used, with more or less variation, as articles in "Outing" and "Country Life in America," and one in "The Twentieth Century Home," but many of the illustrations have never yet been published.

Every lover of birds realizes the great need there is for their protection. For the accomplishment of this end, organization is absolutely essential, and it has been secured in the forming and recent incorporation of "The National Association of Audubon Societies for the Protection of Wild Birds and Animals," under the laws of the State of New York. Largely through its agency, with the coöperation of right-minded sportsmen, excellent laws have been passed in most of the states of the Union. Through the untiring agency of its president, Mr. William Dutcher, some money has been raised and wardens have been hired to guard certain great

colonies of water-birds, from Maine to the Gulf of Mexico, and elsewhere. Some of these breeding-resorts, through the representations of this association, have been set off as government reservations by President Roosevelt, than whom the birds have no more friendly protector.

It is a delightful experience for one who loves the birds to visit these protected colonies, once nearly annihilated for the millinery market, or in wantonness, but now swarming with bird-life. Other localities are still suffering in the same way as did these, largely because the "sinews of war" have not been supplied for their protection. Here is a great economic and humanitarian movement which consecrated wealth has hitherto overlooked. If it could be properly endowed and supported, immense good would result. Our fields, woods, shores, and waters might abound afresh in beautiful wild life, and agriculture, our basal industry, would be spared increasing devastation and loss.

If the portrayal of some of the delights which I have found amid beautiful nature, in the haunts of the birds, shall help to kindle in others the enthusiasm which has done so much for me with its rewards of health and happiness, and serve to gain new friends for the birds, I shall be more than satisfied.

HERBERT K. JOB.

KENT, CONNECTICUT.
April 1, 1905.

WHITE HOUSE, WASHINGTON

MY DEAR MR. JOB:

As a fellow Harvard man I must thank you for your exceedingly interesting book. I have been delighted with it, and I desire to express to you my sense of the good which comes from such books as yours and from the substitution of the camera for the gun. The older I grow the less I care to shoot anything except "varmints." I do not think it at all advisable that the gun should be given up, nor does it seem to me that shooting wild game under proper restrictions can be legitimately opposed by any who are willing that domestic animals shall be kept for food; but there is altogether too much shooting, and if we can only get the camera in place of the gun and have the sportsman sunk somewhat in the naturalist and lover of wild things, the next generation will see an immense change for the better in the life of our woods and waters.

Faithfully yours,

Theodore Roosevelt

P. S

But I am still something of a hunter, although a lover of wild nature first!

(This letter, written after a reading of the author's earlier book, "Among the Water-Fowl," is here printed by permission of the President.)

NEST AND EGGS OF WILSON'S SNIPE

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There is a pleasure in the pathless woods,
There is a rapture on the lonely shore,
There is society where none intrudes
By the deep sea, and music in its roar:
I love not man the less, but nature more,
From these our interviews, in which I steal
From all I may be, or have been before,
To mingle with the universe, and feel
What I can ne'er express, yet cannot all conceal.

BYRON.

Part I

Adventurings in Florida Wilds

Palmettos ranked, with childish spear-points set
Against no enemy — rich cones that fret
High roofs of temples shafted tall with pines —
Green, grateful mangroves where the sand-beach shines —
Long lissome coast that in and outward swerves,
The grace of God made manifest in curves.

LANIER.

PART OF THE PELICAN CITY, AS SEEN FROM THE BOAT

CHAPTER I

CITIES OF THE BROWN PELICANS

There, in sweet thraldom, yet unweening why,
The patient dam, who ne'er till then had known
Parental instinct, brooded o'er her eggs,
Long ere she found the curious secret out,
That life was hatching in their brittle shells.
Then, from a wild rapacious bird of prey,
Tamed by the kindly process, she became
That gentlest of all living things, — a mother.

JAMES MONTGOMERY. From "The Pelican Island."

EARLY spring in New England is apt to be, at best, the most trying time of all the year. One recent season it was notably so, with its succession of raw, sunless days and protracted storms. During some of my long drives, in March, through the thawing and stiffening mud, hunting for nests of the Great Horned Owl, I was almost frozen, particularly as no successes came, with their exhilara-

tion, to make me feel that any sort of weather was glorious. Then April was ushered in with day after day of cold, dismal rain. Not a bud had swelled; hardly even a blade of grass was green.

Yet I was biding my time, and soon, as though by magic, I found myself in a new world. On the eighth of April, with tremendous downpour and shrieking blasts, this mockery of a spring fairly outdid itself. Forswearing travel by sea, under such circumstances, toward midnight a congenial friend and I ensconced ourselves comfortably under the blankets of a Pullman sleeper in Jersey City. When we arose, we were at the national Capital, and strolled awhile amid young leaves and flowers in the parks. In the afternoon we were rolling through Virginia and North Carolina, gazing upon blossoming peach-trees and bursting buds. Early next morning, as I raised the curtain, I saw dense green foliage and summer skies, in the environs of Savannah. Then came landscapes gay with rustling palmettos, and we were in Florida. Winter clothing was discarded, and we almost forgot the chilly Northern clime with its discomforts.

Halfway down the East Coast Railway we had the train stopped at a little flag-station, where our guide was waiting for us. In a short time we were sailing across the tepid waters of the Indian River, exulting in the mild, moist air, watching the Scaup Ducks which rose in flocks before us and the silvery mullets leaping from the water in all directions. On the other side, upon the narrow peninsula of land which separates Indian "River" from the ocean, we found a little wharf up a sort of lagoon, and back of it a pleasant house, shaded by palms and live-oaks, where we made our headquarters. Oranges and lemons hung from the trees around the doors. Mockingbirds and Cardinals gave splendid vocal exhibitions by day, as well as various other birds new to us, while at

night the curious "Chuck-Will's-Widow" and the Florida Screech Owl put in their contemplative refrains. For the first few days we almost wilted under the eighty-five degrees of temperature, Fahrenheit, but soon got ourselves in good form for hard tramps and various adventures.

On the morning of the sixteenth, after waiting for the regular sea-breeze to arise, we were making a slow start for Pelican Island, twelve miles farther down the river. Within forty minutes the expected breeze began to spring up fair from the north-northeast, and we scudded along, rejoicing in the delightful conditions and surroundings. The mullets were leaping, as usual. Scaup Ducks and Scoters flew up before us, while Bald Eagles soared and Ospreys plied their fishing amid lavish abundance, flying with their prey to the tropical-looking shores lined with palms and mangroves. By ten o'clock we began to see lines of great pelicans with slow, measured flight coming in from the ocean and flying downstream past us, and before eleven o'clock the guide pointed out Pelican Island.

No tremendous cliffs were there, as at Bird Rock, in the Gulf of St. Lawrence. Indeed, until we had come quite close, it was hard to distinguish this small low island from the neighboring shore, not half a mile away, with its jungle of palms and mangroves. Then we could see many beating wings, and, with our field-glasses, a great crowd of birds upon the ground — the Brown Pelicans upon their nests. With eager anticipation we made ready our battery of cameras for the bloodless fray, casting anxious glances at the heavy cumulus clouds which threatened to spoil the light at the critical moment. And now we were close enough to take in the whole situation. Here was the low, flat islet of only about three acres, somewhat triangular in form. A very few small palmettos and low mangrove trees and stumps were standing, but

most of the area was an open expanse, overgrown with tall weeds and grass, except for two considerable sandy tracts at the east and southwest corners. Both of these tracts were fairly covered with an army of great birds, about the size of geese, each of a general grayish color above and dark brown beneath, with long brown and white neck and enormous bill with pendant pouch that was held pointed downward in a most ridiculously solemn, pompous fashion. There were, too, a few of the birds located at the northwestern end, and also smaller overflow colonies on at least two other islands about a quarter of a mile eastward. These are the Brown Pelican, a Southern species, entirely different from our only other kind, the American White Pelican, which is snow-white, with black wing-tips, and is found mostly in the interior and on the Gulf of Mexico, breeding on islands in lakes from Minnesota northward.

From time immemorial this little island has been the principal, if not the only, breeding-ground of the Brown Pelicans of the east coast of Florida. Though there are hundreds of other islands apparently just as good, this one alone has attracted the pelicans. Dastardly plume-hunters have at times all but annihilated them; swinish egg-collectors have robbed them of every egg in sight; yet still they remain faithful to the old home-land of their ancestors. Creatures of habit they are, like the chickens that persist in roosting in the orchard, despite the advent of winter weather.

Our boat was now closely approaching the east end of the island, directed by the guide, while we held ready our cameras, expecting at every moment to see the birds rise in a cloud and leave the vicinity. To make sure of present opportunity, we took snap-shots as the birds still sat on their nests. Then we prepared in earnest for the grand flight. The boat was run ashore abreast of the colony, but without alarming

them. Then we stood up and shouted, but hardly a bird rose. There they sat upon their nests, hundreds and hundreds of them, many within forty or fifty feet, solemnly gazing at us. It was not until we sprang out upon the shore that there was any considerable flight, and even then we noticed that it

"IT WAS NOT UNTIL WE SPRANG OUT UPON THE SHORE THAT THERE WAS ANY CONSIDERABLE FLIGHT"

occurred only within a radius of fifty or sixty feet, the rest of the colony remaining on their nests apparently in perfect unconcern. We also noticed with delight, as we went back to the boat for more plates, that the flying birds, after a short circle out over the water, came right back and settled upon their nests. The fear that it would be next to impossible to secure pictures at close range was proven groundless.

Equipped with all necessary photographic implements, we now started out for a thorough tour of inspection. A great area of nests lay before us, a few of them built on the spreading limbs or tops of the mangrove bushes, but the great majority were on the sand, usually about a yard apart. Those

on the bushes were built of sticks, weed-stems, and grass, and were quite bulky, while the ground nests were much smaller, composed largely of soft materials. The contents of the nests were greatly varied. Though the nesting-season of the pelicans begins as early as November or December, many of the nests still had their complements of great, dirty-white eggs, some of them comparatively clean and fresh. These may have been second or third layings, owing to previous deprivations, though to what extent individual pelicans may be irregular in their nesting-time, I cannot say. In other nests, there were young, in all stages, from the naked, newly hatched, and rather repulsive-looking callow bird-life, to the more sightly, yet not altogether handsome, downy stage. Still other nests were empty, but that their mission had not been fruitless was evident from the numbers of well-grown young that were running about in all directions. Evidently they were all but able to fly, as their wing-feathers seemed to be well grown, though on the bodies the feathers were still more or less downy and ragged. In color they were very different from their parents, being of a lighter gray, and mainly white on the under parts.

NEWLY HATCHED YOUNG PELICANS

These young pelicans afforded us quite a little amusement. Though they evidently inherited not a little of the true pelican gravity of demeanor, their childishness could not but show out. For one thing, they were, like most children, eminently social. They made me think of gangs of boys upon the street corners, as they congregated here and there in groups, chattering away in peculiar, guttural tones, individuals falling

THE YOUNG PELICANS IMPROVE WITH AGE

occasionally into some little dispute. Then the gang would scamper away, no doubt bent upon some gay prank, if, indeed, that were conceivable of such dignified creatures as pelicans, however young. On the whole, though, they seemed sedate enough to satisfy their industrious parents, who had gone off across the strip of "hammock," or tropical jungle, to the ocean shore, there to plunge headlong into the sea and catch fish, which they would carry home in the net-like pouches to fill young maws, doubtless, like those of other children, in a chronic state of emptiness.

We learned from the guide and others that it was the pelicans' custom to feed their young in the morning and late in the afternoon. Strangely enough, the pelicans do not fish near the island in the river, but, in flocks of about a dozen,

fly across to the ocean for that purpose. Since it was not feeding-time during our stay, we saw this curious operation only a very few times. The youngsters, with greedy violence, thrust head and neck away down into the parent's gullet, and gobble away at the partly digested fish. In the case of

"THEY MADE ME THINK OF GANGS OF BOYS"

the older children, roaming around in bands, it would seem remarkable if parents can identify their own, and if communism is not for a time the order of pelican society.

Presently we made a visit to the other large group of pelicans at the southwest corner of the island, about a hundred and fifty yards from the first. Here we found a similar state of affairs. Each of the many occupied nests was brooded over by a devoted parent — I could not tell whether male or female. Yet there was considerable going and coming, for one reason or other, making a lively scene, with enough noise from the harsh, croaking voices of the birds to suggest considerable

street traffic in this pelican city. The citizens all dress well, and look remarkably neat in this favored social order where poverty is unknown, and where there are no strikes or other signs of discontent. But let not the visitor hope to vie with the pelicans in neatness of apparel and apparent cleanliness. The passing birds are continually dropping a watery excrement which, though it does not seem to stick upon the oily plumage of the pelicans, certainly does not allow the garments of human visitors to remain immaculate. The ground, too, is very dirty, infested by swarms of insects, and in a short time our clothing and cameras were well besmeared.

Naturally we were interested to make an estimate of the population of Pelican Island. As nearly as we could count, there were four hundred and fifty nests at the east end, five hundred and twelve at the southwest, and fourteen at the northwest, making nine hundred and seventy-six in all. This means nineteen hundred and fifty-two adult birds. The most common number of the eggs in a nest was three, but often only two. In only one nest did we find four, and in one other five. Assuming that each pair raises two young, a colony ought to double every season, if they were not disturbed. On the adjacent islands there were evidently over two hundred nests, though we did not land. Assuming, then, that there were twelve hundred nests in all, the adult population of the whole colony can be placed at twenty-four hundred.

Mr. F. M. Chapman has recorded that on a visit to this island, in 1898, he counted eight hundred and forty-five nests, and noticed a very few on an adjacent island. Assuming that there were then nine hundred nests in all, it is evident that the colony had increased about one third in four years. This desirable result may be due to the better enforcement of strict laws in Florida against the destruction of plume-bearing

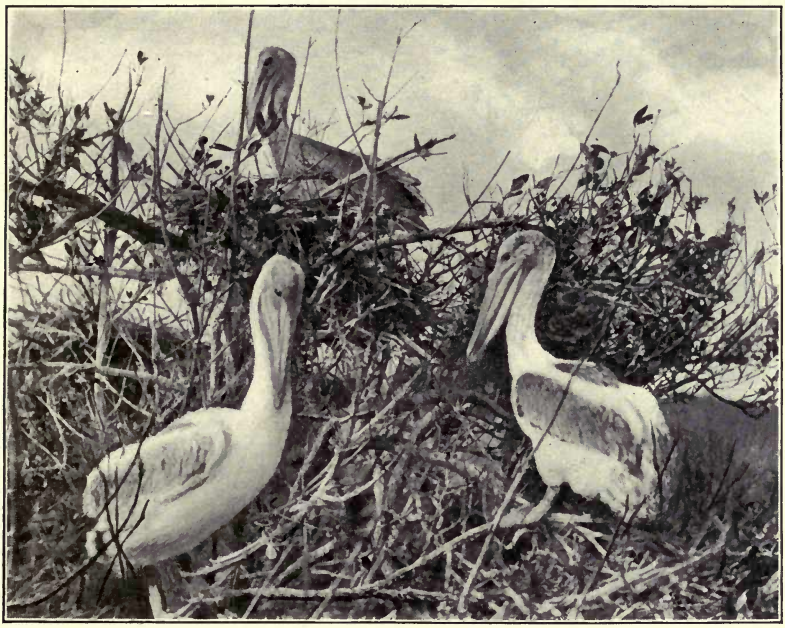
birds, the efforts of the American Ornithologists' Union in appointing a warden to watch the colony, and a bettering of public sentiment in Florida, realizing the great value of interesting wild life in attracting tourists. Our own party is a case in point. To see this pelican colony, heron rookeries, and other bird resorts, three of us — one more having followed — had come all the way from New England, meaning several hundred dollars distributed among railroads, boarding-houses, guides, stable-men, and store-keepers ; and we are only a few out of thousands. The people of Florida are short-sighted indeed if they allow vandals and plume-hunters to massacre these pelicans, herons, and other interesting creatures.

In making an expedition of this kind to such great bird resorts as this pelican colony, one feels like a general who is planning and conducting the siege of some great capital. Plans must be carefully made beforehand, the photographic equipment must be complete and in perfect order, and the worker must be in readiness to take advantage of every favoring circumstance. My equipment at this time lacked the very desirable reflecting camera, but I had two good long-focus cameras, a 4 x 5 and a 5 x 7, with good lenses and a telephoto lens besides. These I was determined to use for all they were worth, and with them I went systematically to work to "take" Pelican Island and all its defending garrison.

First I took a number of general views, snap-shots with camera in hand, of the pelicans on their nests and in flight. Then, with the camera on the tripod, I photographed nests at close range, with eggs and young, using the ball and socket clamp. When these general, I might say "routine," matters had been disposed of, I had the rest of the time for that fascinating, but often slow and exasperating, branch of the subject — bird-portraiture. Over at the farther end of the

THE BROWN PELICANS ON THEIR NESTS

southwest settlement, the area of nests extended almost to a tract of tall weeds. Here I found it convenient to plant the camera on the shortened tripod, allowing the tall weeds to arch over it, where it commanded a view of a number of nests



YOUNG PELICANS, ALMOST READY TO FLY

at moderate distance. When I withdrew a few yards back, the birds at once returned, and I pulled the thread which I had attached to the shutter. Then, after two or three exposures, I placed the camera on its case close to a nest or two, covered it with the rubber cloth, and the whole with grass. The birds did not mind this, and returned at once, giving me all the chances I wished to make exposures from behind a clump of grass down by the shore.

Over in the eastern colony a pelican that had a nest at the foot of a stub returned readily to her eggs, though I had placed the large camera on the sand, without concealment, but little over a yard away. She would waddle past the camera up on to her nest, settle down, draw in her chin in the most dignified attitude, and seem to say, "I 'm all ready now; pull!" I also set the camera on the tripod in the open near some nests on a mangrove, and pulled the thread when some of the old birds alighted on the empty nests, near the large youngsters. Another successful method was to drive a company of the well-grown young down to the shore, where I could get within ten feet of them and secure snap-shots.

We stayed on the island until half-past four, and were careful not to remain close to any nest for more than a few moments at a time, so as not to keep the birds away. Naked, newly hatched young birds of any kind will soon die in the sun, if not brooded, and visitors to the bird colonies will do well to remember this, or they may do tremendous damage. In this case the pelicans were so tame that no harm was done by our stay on the island, with the exercise of a little care, for the birds did not mind our presence at all, as long as we kept thirty feet or more from the nesting area.

At one o'clock the proposal was made to have dinner. The rest ate without me, for I told them it seemed little short of sacrilege to lose a single moment of those brief, precious, golden hours in the wonder-land for such a sordid thing as eating, that one could do at any other time. So I fasted, and worked until we sailed away.

During the day the wind had steadily increased, and all the afternoon had been blowing a gale down the river. We waited in vain for it to veer to southeast, as it usually does by night, and at length had to start on our long, hard beat to

windward. Our craft was a wretched sea-boat. Every wave broke completely over her, and in a moment we were all soaked to the skin. By dark we had hardly made four miles, and were almost perishing with cold — yes, even in Florida!

ADULT AND YOUNG PELICANS ON NESTS IN MANGROVE BUSHES

We debated leaving the boat, walking across the peninsula and up the ocean beach. But the thought of stepping on rattlesnakes in the dark deterred us, and we pounded wearily along. The night was dark indeed when the wind canted a few points to the eastward, and at about eleven o'clock, weary, shivering, hungry, we reached "Oak Lodge" again, not sorry, however, that we had visited Pelican Island.

About two weeks later I made the trip again with another friend who had joined us. This time the day was perfect, with a fair wind both ways, and nothing could have been more comfortable and enjoyable. Upon our return, our boarding-mistress, Mrs. Latham, entertained us with her accounts of how she secured some live pelicans for the Bronx Park (New York) aviary. She sat among the nests on dark nights covered with brush and stubble, and, when the birds finally gathered around her, seized one of them by the neck and reduced the flapping thing to subjection.

The year following my visit, Pelican Island was set apart by President Roosevelt as a government reservation for the propagation of wild native birds. Warning notices were posted and a warden empowered to prevent people from landing. Here these pelicans had always nested within the memory of man, subject to all manner of cruel persecutions, from which now they were to be ever freed, as long as they should repair to this sanctuary. Unfortunately the government made no appropriation to instruct the pelicans in reading, for the next spring, harassed by an early high tide, they forsook the abodes of their fathers and nested upon some adjoining islands. One day I told the President how the Indian River pelicans, citizens of the State of Florida, had refused to submit to the national ordinances. With a merry twinkle in his eye, and an amused smile, he exclaimed, "The provoking things!" Mighty are the wild, free children of Nature! We could exterminate them, to be sure, but yet not all the rulers and governments and armaments upon earth could compel that band of pelicans to breed where they did not take a notion to. Since then, having vindicated their right to independence, they have returned and placed themselves under Federal protection.

I also found that the experiences of the Indian River had

been repeated upon the South Carolina coast. One bright afternoon we anchored our yawl off a veritable "sea island," a little sand-flat out in the open ocean. This was another reputed city of the pelicans, and here before us was quite an army of the great birds drawn up along the sand in pompous array. Now the pelican, ordinarily a most wary bird, as soon as it has a nest to guard, becomes one of the tamest and

A TYPICAL PELICAN'S NEST

most stolid members of its race, parental tenderness overcoming the wildness of its natural instinct. So, when I saw the pelicans, even before we had anchored, leave the island and alight out upon the sea, I was overwhelmed with well-grounded misgivings. The cause was soon made plain. Great white eggs were lying, scattered or in windrows, all over the sand, some of them buried beneath it. A recent gale had flooded the island and "broken them up," as the saying is. The eggs were fresh, and some were still in the nests with only a little sand washed in. Yet the birds had deserted and resumed their natural wildness.

During the same cruise we visited two other pelican cities of long standing, which were likewise upon low sand-bars. Here, though the wary old pelicans were about, there was not a sign of an egg. The sea may have washed them entirely away. On the west coast of Florida the pelicans are said to nest usually upon low trees, as some few did in the Indian River colony, and thus escape this danger, only to suffer at the hand of man. Though nature may be seemingly even more wanton than man in its destructions, this is not an example to be followed, but a warning that if he, too, turns destroyer, the birds can have little chance to survive, and the balance of nature will be overthrown.

BROWN PELICANS ON THEIR NESTS, AT CLOSE RANGE

MAN-O'-WAR BIRDS. "NOW THEY BEGAN TO RISE"

CHAPTER II

FOLLOWING AUDUBON AMONG THE FLORIDA KEYS

As the Marion neared the Islet called "Indian Key," which is situated on the eastern coast of the peninsula of Florida, my heart swelled with uncontrollable delight. AUDUBON, "Episodes."

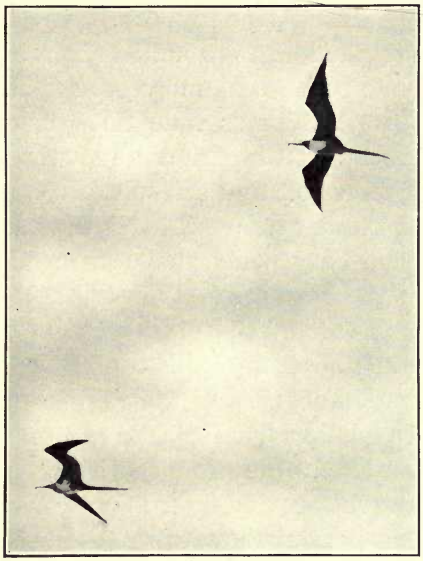
RARE and beautiful water-birds in amazing numbers, tropical islets with their dark mangroves, waving palms, and coral shores, waters prolific in fish and huge sea-turtles, with the soft Southern zephyrs playing over all — these were my impressions of the Florida Keys gathered from the writings of Audubon. From boyhood I had gloated over these accounts of wonders which I was now to see for myself. No small part of the pleasure of such an expedition is in anticipation, planning, and preparation. So the "triumvirate" of various former expeditions set their wits at work on the elusive, yet delightful, campaign of detail. Months of inquiry and correspondence resulted at last in

learning somewhat of "the lay of the land" in that morass, which even yet in part remains a blank upon the map, and in securing the services of two ideal guides, men brought up in the unsurveyed and trackless wilderness of the Keys and Cape Sable, who knew every islet, channel, and lake, and the wonderful rookeries of the herons, ibises, egrets, and other interesting birds.

It was on a glorious bright morning, the twenty-third of April, 1903, at Miami, at that time the terminus of the railway, that we began our cruise in the old battered seven-ton schooner, the Maggie Valdez, which one of the guides had brought from Cape Sable to meet us, as a substitute for his finer craft, which had recently been wrecked. With a snapping breeze from the east we ran down Biscayne Bay, past the flat, densely wooded Florida mainland on our right and low wooded islets well to seaward on the left. By early afternoon we had traversed the wider part of the bay, and were now at last fairly among the Florida Keys. That foreign word had hitherto savored to me a good deal of mystery, though not to such a degree as to a certain New England villager, who, when I told him that I was to visit the Florida Keys, remarked, with an air of entire innocence, that there must be *locks* down there too.

Our vessel was now gliding along in calm, shallow water, which was dotted here and there with the far-famed keys. These were of the mangrove type, little round bunches of dark, shiny foliage which seemed to spring directly from the water, as indeed is often the case. Sometimes the low flat upon which they grow is entirely under water. Even when it is not, the trees grow out from the shores, leaving no beach at all. The rounded mass of dark foliage gives the islet the appearance of a fortification out in the water. But such water! Should a painter faithfully produce upon his canvas that

exquisite pale emerald green of such wonderful intensity and brilliance, the critic would surely declare it exaggerated and unnatural. Overhead sailed the Frigate Pelican, or Man-o'-War Bird, that wonderful aeronaut of tropical waters, while the Brown Pelican flapped along or plunged into the brine after the fish. Then we anchored for the night at Cæsar's Creek, the last channel for many a mile out into the open sea. Just as we did so, a great dark bird of prey, that I took to be a Caracara Eagle, flew directly over us, seemingly almost minded to alight upon the mast-head. Then followed a pull in the skiff along the mangrove thickets at the edge of the keys, where I noted various herons and numbers of migratory Pigeon Falcons, as well as many small birds.



"THE MAN-O'-WAR BIRD, THAT WONDERFUL AERONAUT OF TROPICAL WATERS"

A study of the coast-chart was now illuminating to us as it had never been before. Here was the outer chain of long, narrow islands forming a parallel breakwater for the Florida coast from Miami away out beyond Key West, some two hundred miles. These were of another type from the little round mangrove keys of mud in that they were originally coral reefs, upon which soil had been deposited. They are now densely wooded, and are used for the cultivation of

tropical fruits. Inside this natural breakwater is a vast shallow bay with immense flats of sticky, white clay mud, and dotted with mangrove islets. New "keys" are continually started by mangrove shoots which, drifting about, take root on these flats and, multiplying, form islets by the soil which the tide lodges around their roots. A very few of these keys have beaches of finely ground shell-sand.

In Audubon's time this great inaccessible wilderness was the resort of pirates and wreckers, and even now it is so inaccessible and difficult of navigation that a sail, other than of the few native fishermen, is seldom seen. Few naturalists have ever penetrated the mazes of its shallows, and many of the keys are still nameless. Even indefatigable Audubon only entered the portals of Florida Bay and Barnes's Sound, and no other ornithologist has given to the world any extended account of the region and its contents. Naturally it was a very enthusiastic company that went to sleep on the borders of the promised land, harassed though they were by mosquitoes and by troops of great two-inch-long cockroaches that perambulated over their prostrate forms.

Early the next morning we sailed out through the gap in the coral reef into the open sea, to cruise outside the keys, since the Maggie, drawing four feet of water, was too deep for the flats of Card's and Barnes's Sounds. Following the shore a couple of miles off Key Largo, the greatest of the keys, — some thirty miles in length, — we varied matters by lingering at one point along the reef to catch a few fine fish for dinner.

Another diversion, as we sailed along, was the ever-wonderful migration of the birds, that seemed now to be at its height. Thousands of little land-birds were making their long, weary flight from the West Indies, or even farther, to our shores. Most that I saw were Water-Thrushes, Redstarts, Black-poll

Warblers, and Bobolinks. Even with Florida in sight, those last few miles were often heart-breaking. A number of the little creatures alighted on our spars, or even on deck, and sometimes allowed us to take them in our hands. One such was a male Bobolink in a curious mottled transition stage of plumage. Another Bobolink tried to alight on the end of the boom, but was too much exhausted to gain a footing, and fell into the water, where it lay struggling pitifully, sealed for death. No land-bird which falls into the water at any distance from shore can escape, as its plumage soon becomes soaked and it cannot rise. Thus do multitudes of the little migrants perish.

Towards evening we ran in to anchor under the lee of Indian Key, where Audubon began his famous entrance into Florida Bay in 1832, coming there on the U. S. Revenue Cutter Marion. Here he landed and was entertained by a customs collector living on the island, and from this base of supplies he made some boating-trips for twenty miles into the shallows of Florida Bay.

It was with absorbing interest that I gazed upon, and then explored, this beautiful tropical islet. Though I could not exactly trace the great naturalist's literal footsteps upon its flat coral rock, I could recall his admiration at the beautiful little birds he saw flitting among the bushes — this very time of year it was. Many migrant warblers, thrushes, pigeons, and the like, were happy amid the luxuriant vegetation of cocoanut palms, century-plants, and the thorny thickets, in which last the mother Ground Doves brooded their young in frail nests, as the evening shadows fell. And when the sun rose they were all jubilant with song. We drank milk from the green cocoanuts, rambled about and talked with the old man who, with his wife, represented the human population. The old fellow had never heard of Audubon, and was more

interested in the boat he was building than in our talk of Audubonian antiquities.

Years after Audubon's visit, this island was occupied by a Dr. Perrine and his family, who were raising tropical fruits. At the outbreak of the Seminole War a band of Indians murdered the doctor, but failed to find his family, who were concealed in a turtle-well. Later on an enterprising individual — according to tradition — set up on this lovely key with its waving palms a saloon and gambling place, to which resorted all sorts of desperadoes. Shade of Audubon!

Audubon tells that immediately after landing on Indian Key, he was conducted by his host across to a neighboring long key, where he and his party inspected a large rookery of nesting Florida Cormorants. From his account I should judge that this was Lower Metacombe Key, which we could see about a mile to the westward, a dark strip of mangroves, some four miles long. We did not visit it, as the guide said the Cormorants did not now resort there, but frequented some smaller islands farther back in the bay. So, hoping to happen upon the route of Audubon's second-day excursion (which he says he made between three A. M. and dusk), to a key, evidently some miles away, where he found the Man-o'-War Birds beginning to nest, we got under way about eight A. M., after further photographing on Indian Key. Our course lay between Lower Metacombe and Lignum-Vitæ keys, and out into the wilderness of "soapy mud-flats," or "soap-flats," as Audubon called them. The term is an apt one, for the sticky, whitish clay mud had a very soapy appearance, and the tide running over it stirred up a whitish lather that was suggestive of soapy dish-water.

Before long it was our lot to form a very intimate acquaintance with these same soap-flats which the great naturalist had crossed. We had passed several keys, and were approaching

a group of small ones, marked on the coast-chart as the "Bow-leg Keys," I should think some eight miles north of Indian Key, when the guide found it necessary to run the vessel through a very narrow channel, to reach some open water beyond. He had vainly tried to hurry us from Indian Key, as the tide was falling, and he was not to blame when, though in mid-channel, the schooner ran hard aground. Despite the liability of meeting sharks, we all stripped and jumped overboard, and braced our backs against her sides and stern. Every moment the tide was falling, and it seemed destined that the precious light of April 25 should be lost idly upon a soap-flat.

I confess to feeling rather exasperated for a few moments, until, with my field-glass, taking in our surroundings, I noticed a great swarm of large birds of some sort hovering over and beyond the nearest key. The day's work was now laid out for us. Launching the tender, we rowed as near the key as we could, then dragged the craft over the tenacious white "soap" the rest of the way.

On the first island were found no birds save a score or more of Louisiana Herons that were nesting, and a pair of Red-bellied Woodpeckers, which had a nest in a hole in a dead limb of a black mangrove. It was the next island, half a mile beyond, over which the cloud of birds were hovering and alighting, as we could now see. So we pushed along over the "soap," until, as we neared the island, I waded on ahead, camera in hand, for a snap-shot. As I came around one end of the island, there was consternation among the inhabitants, and a confused flapping of great wings was seen and heard, beating the tree-tops and the air. Two or three hundred, probably, rose, though many were out of sight farther around the island when I made my snap-shot. There were Brown Pelicans, Florida Cormorants, and Man-o'-War Birds.

The two former flew directly away; the Man-o'-War Birds, separating from the others, rose higher and higher in a flock, and on almost motionless wings floated over our heads, giving me a couple more pictures.

Eager to see the nests, we pushed the boat across the narrow channel that, as usual, ran close around the island, and forced our way in through the tangle of mangrove roots and branches. Everything was filthy with droppings, and great was our surprise and disappointment to find that the birds were not nesting. That they resorted there habitually, however, was evident enough. We learned afterwards that it was a regular roosting-place. The birds, though now dispersed, we saw return that evening in much greater numbers, and when we sailed by here a week or more later, at dusk, there were hundreds of them, on the trees and hovering. Ever since he had known the region, the guide said, this had been the principal resort of these birds in that vicinity, and, inasmuch as all water-birds are very tenacious of their resorts, it is more than probable that it was here Audubon came on his second-day's excursion, and found the Man-o'-War Birds. Before leaving the island I climbed to and examined a great eagle's nest in one of the larger trees.

It was not till sundown that we were able to warp the schooner out of her sticky resting-place and bid adieu to the returning flocks of night lodgers on Bow-leg Key. We sailed along, dodging shoals, or scraping over them, until about nine o'clock, when we ran aground again. We stayed there till daylight, but then got off easily, managing that day to keep afloat. The wind was light, and we worked leisurely along, seeing a big turtle now and then floating on the surface of the water, and an occasional sea-bird, one of these being a Parasitic Jaeger. In the afternoon we passed Sandy Key, the farthest point that Audubon reached. A few individuals

of that conspicuous and striking species, the Great White Heron, — the largest heron of North America, a species which Audubon here discovered and named, — were perched

YOUNG GREAT WHITE HERON

suggestively on the trees. But as the guide was in a hurry to get home, we postponed our landing there, and kept on toward a point on the distant Florida main, about ten miles east of Cape Sable.

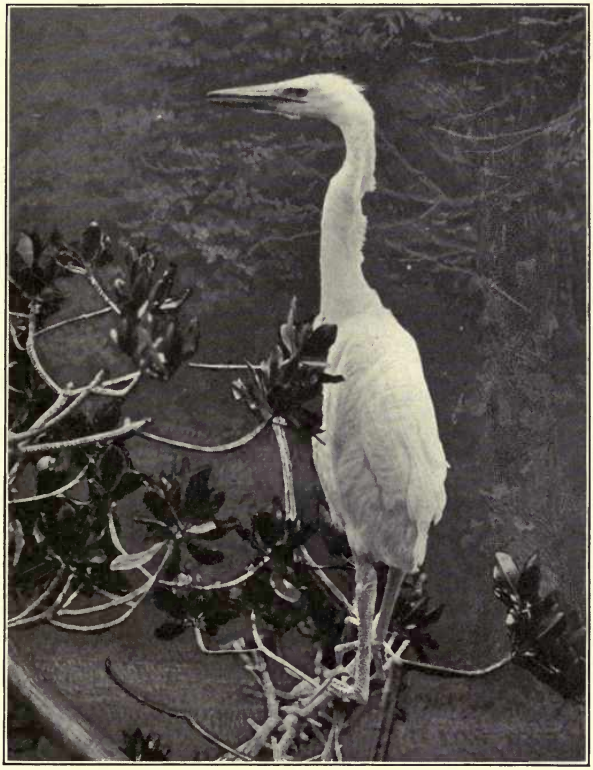
The wind now began to fail us still more, and at dusk, when four miles from our destination, it was flat calm. Here we anchored, and the guide rowed ashore to his home, intending to return early in the morning.

Some time in the wee, small hours, when it was yet very dark, one of the men, sleeping on deck, awoke, and, deciding that something was wrong, aroused the company. Sure enough, the wind had arisen strong from the northwest and we were adrift, evidently well out in Florida Bay. We could just make out two keys under our lee. The anchor had become fouled and was dragging. When cleared, it held us, just as the vessel began to ground in the mud. At daybreak we got up jib and mainsail, all the sail we could carry in the brisk wind, and beat in toward a point on the distant shore where the glasses revealed a couple of buildings, which proved to be our destination, where we were to make headquarters.

We remained here a week, making trips into the interior, and to neighboring keys. Several of the latter, three miles off shore, we visited in a small boat, and here it was that I first made real acquaintance with the Great White Heron, a splendid snow-white creature that stands well-nigh as tall as a man, measuring about seventy inches from bill to claws. Approaching one of these rather small keys, I saw several of the noble birds flying uneasily about over the trees, and, clambering about for a time amid mangrove roots and slippery mud, never ceasing to fight mosquitoes withal, I was rewarded by coming to a spot where, in some particularly large trees, several nests of the Great White Heron were built. They were placed in crotches, twenty to thirty feet from the ground — bulky, wide platforms of sticks, saucer-shaped, profusely whitewashed, and each with two or three snowy white young, in size and age from only a few days

old to a stage where they were about fully grown, and all but able to fly.

One nest especially interested me. It was conveniently situated about thirty feet from the ground, and was occupied



"HE STOOD LIKE A STATUE OR OBELISK"

by one imposing young heron, another having left. A gentleman in appearance, he was in behavior, as he stood there on the nest politely to receive me, not scrambling or fluttering out, as all young herons are too apt to do. While I was

admiring him, and screwing up my photographic apparatus, he never moved, nor did he at the critical moments of exposure. Then, as I would stir him up a bit, he retreated out to a branch, where he stood like a statue or obelisk, showing his high breeding in every inch of his splendid stature, while I again took his picture, after which I gratefully bade him farewell.

Not so well-bred were a trio in a neighboring nest, about half grown. These were of the sulky sort, and obstinately lay down, refusing to stand, in spite of all I could do, though the guide climbed up and did his best to make them behave. Another nest with two very young fledglings also gave me trouble. There was no point of vantage, save from almost directly above; it was in the shade, and the breeze was swaying everything, and the youngsters, as is the way with small feathered fry, were squirming about like worms. However, I conquered them, and then climbed to a rather lofty nest, near by, of the Ward's Heron, — a species thought by some to be only a peninsular race of the familiar Great Blue Heron, — whose two youthful inmates were very ferocious, and spent their time making vicious lunges at me with their bills, accompanied by the harshest expletives of the heron tongue. I did not catch sight of their parents, but now and then a Great White Heron flapped warily overhead at a safe distance, to reconnoitre. What an aggravation it is to photograph a flying snow-white heron against a clear blue sky, and find that as both cannot be white, it is the heron that has to be falsely portrayed as black!

Having secured another, and nameless, vessel, no better than the Maggie, as it proved, except that it was of lighter draught, we started off for a general exploration of the inaccessible keys of the inner bays. First, however, we sailed westward to Sandy Key. Though the guide said there were

no bird-rookeries on it now, I was anxious to examine the island where Audubon passed the night under the mosquito net, which he so vividly describes in one of his "Episodes." With a good easterly wind we were there by noon, and, having eaten, hurried to go ashore. This key is long and narrow,

YOUNG WARD'S HERONS. "MAKING VICIOUS LUNGES"

over a mile from end to end, is wooded, except for some open plots of grass and cacti, and is graced with a genuine beach of shell-sand.

When Audubon landed here years ago, he records that "our first fire among a crowd of the great godwits laid prostrate sixty-five of these birds. Rose-colored curlews [Roseate Spoonbills] stalked gracefully beneath the mangroves. Purple herons rose at almost every step we took, and each cactus

supported the nest of a white ibis. The air was darkened by whistling wings, while on the water floated gallinules and other interesting birds." Next morning at low tide, he was amazed to see the flats covered with feeding birds in all directions. But now, as we reviewed these same scenes, traversed the beach of shell-sand, searched the groves of red and black mangrove, examined the little interior swamp and the patches of cacti, we found a different state of things. Too convenient a landing-place for "conch" fishermen, there were no longer "acres" of ibis nests. A few pairs of Great White Herons, probably nesting in the mangroves, flew out and alighted on the flats, where there were also Great Blue and Louisiana Herons feeding, as well as some Laughing Gulls, Black-breast Plovers, and other waders. Some Brown Pelicans, Fish Crows, and Turkey Buzzards were flying about, and a pair of Bald Eagles, soaring conspicuously over the island, had their nest, a great pile of sticks six feet high, about fifty feet up a large black mangrove. These eagles, we found, breed commonly on the keys.

As we walked along the beach, we noticed, a few yards out from shore, a beautiful specimen of the Pharsalia, or "Portuguese Man-o'-War," floating on the water, its transparent, jelly-like form flashing in the sunlight, resplendent in its blue, purple, and rosy hues. It was interesting to watch it capsize, roll over, and right itself again. Its tentacles reached down into the water, and around it swam a pretty little fish, keeping it close and constant company. From past experience, I was chary of touching anything of the jelly-fish sort, but one of the party, before I could remonstrate, laid hold of it, and began to drag it ashore, the little fish following. Suddenly he let go of it with an exclamation of pain. The creature had well used its means of defence, and for the next hour my friend's arm was aching severely and was partially

benumbed. He will beware of handling these gentry hereafter.

Sailing on again, — this time south and east, — late in the evening we approached Man-o'-War Key and "Bush." The latter is a submerged mangrove islet, and both are old resorts of the Frigate or Man-o'-War Bird. Early in the morning we rowed and waded to each of them in the tender over the shallows and "soap-flats." In the vessel we could not approach them within half a mile. There were no "Men-o'-War," but a few Brown Pelicans and Ward's Herons, and large numbers of Florida Cormorants were roosting upon the trees, though not breeding. The latter gave me a good snap-shot picture or two as a large band doubled past me, leaving the Man-o'-War Bush. I then waded to the islet, and, as I came around its end, surprised a considerable number of the cormorants roosting upon the trees on the other side. Some of them went flapping off low over the water; others fell headlong into the sea as though they had fainted, but immediately disappeared. In a few moments I saw them emerge well off from shore and take to wing.

When I tried to "land" upon the "Bush," I found it a rather uncanny place. There was no land at all; the trees grew out of the water, which was knee deep. Every branch was completely whitewashed with the excrement of the birds, but there was not a nest of any sort. Nor were the cormorants nesting upon the other and larger key near by. But there I found a number of empty nests of the Ward's Heron, which the young had probably left, all built in quite low trees. A pair of Bald Eagles which we saw had their huge nest of sticks in a rather large black mangrove, forty feet from the ground. It was now past their breeding-time.

From here we started out for a long, hard beat to windward, in a southeasterly direction, to reach a little settlement

called Planter on Key Largo, where there was a store at which we hoped to replenish our provisions, the only one in the whole region. I will not dwell upon the efforts of these two days, one of them wet and stormy, spent in scraping over flats and shoals, getting aground, making detours to follow channels, through some of which we had to warp the vessel to windward by poles, skiff, and anchor. Finally, late the second afternoon we came up under Key Largo, about opposite where Planter was supposed to be on the outer shore of the island. Our attempt to tramp across resulted in failure. A creek headed us off, and one of the men got lost in a swamp. It proved that we had landed several miles too far east. Next morning a fisherman came alongside, and told us how to go.

The ground of this key seemed to consist mostly of a hard broken coral rock, so rough as to be capable of soon wearing one's shoes to tatters. What soil there was appeared very scant, yet the settlers had cut away tracts of jungle, and right among the rocks had caused to grow luxuriant groves or fields of tropical fruits, such as oranges, limes, lemons, grape-fruit, figs, cocoanuts, sapodillas, bananas, pineapples, and I know not what else. In some of these rocky fields there were acres of watermelons, unfortunately nearly every melon being bitten into and ruined — by raccoons, it was said. Potatoes, grown in the crevices of the rock, are dug with crowbars, rather than shovels.

Having now plenty of provisions in stock, fruits galore, and a fine mess of crawfish, we cut loose from the base of supplies and explored a number of the inner keys. On most of them there were no water-birds, save a few straggling herons. On one large key, with lakes in its interior, we spent a profitable day with breeding Least Terns, Laughing Gulls, and shore-birds.

"A PLATE FULL OF THE GRACEFULLY SOARING BIRDS"

Despite all our efforts thus far, we had not found the Man-o'-War Birds actually breeding. So we were glad enough, after exploring this key, to run off half a dozen miles before the wind, which had now shifted to the west, to a small key which the guide said was a resort for immense numbers of this great bird. It was back under Key Largo, farther eastward than we had been. We came to anchor near sunset, and at once I set out in the tender alone with the guide, the other ornithologists being busy and deciding to wait till morning. As we rowed through a narrow passage between the mangroves, a break in a long peninsula, there lay the little round green islet before us. First of all flew out some Florida Cormorants which were watching us from a little mangrove clump out in the water. Then, as we approached within long gunshot of the island, began a wonderful scene. Only a few Man-o'-War Birds had been visible, perched on the tree-tops, or flying and alighting; but now they began to rise in scores, then in hundreds, yes, in thousands. The area of the island was hardly over an acre, and it seemed incredible that so many large birds could have found footing on the trees, for the Man-o'-War Bird has a spread of wing of nearly seven feet. I secured a picture of them as they began to rise from the island, and then a number as they soared overhead, the sky being fairly black with them in all directions, before they gradually drifted away to hover over another distant key. One only had to point a camera upward, almost anywhere, and snap, to get a plate full of the gracefully soaring birds.

Then we rowed to the island. Several Reddish Egrets, the only ones we met with on the trip, started out from the mangroves close at hand, as did some Louisiana Herons. The island itself was entirely under water, and the trees were white with filth. But even here the elusive Frigates were not nest-

ing. The Louisiana Herons had eggs, and there were about a dozen empty nests, some of which had feathers in them of the "Men-o'-War," but which were probably the homes of the cormorants which we had seen in the vicinity. Audubon found on the keys rookeries of the Man-o'-War Birds, which were beginning to breed at this very same time, in May, but of late years they have not been known to nest within the United States. Their presence in such large numbers made me confident that they were preparing to lay. To make sure, I had the guide visit these resorts later in the summer, and he did not in any case find the birds breeding. They build a huge nest of sticks, like the cormorant, and lay two or three dirty-whitish eggs. As we pulled back to the vessel through the narrows, a pair of the exquisite pink Roseate Spoonbills flew close by the boat, giving me a splendid and memorable view of their glory.

Alas for the procrastinating naturalists! The Frigates were seen till dark hovering over a distant isle. They did not return to this roost at all, and next morning at daybreak all of them had entirely disappeared, except a few stragglers that rose to mock the cameras of the delinquents. More and more convinced am I that the only safe time to photograph birds, no matter how plenty they may be, is the first time they show themselves.

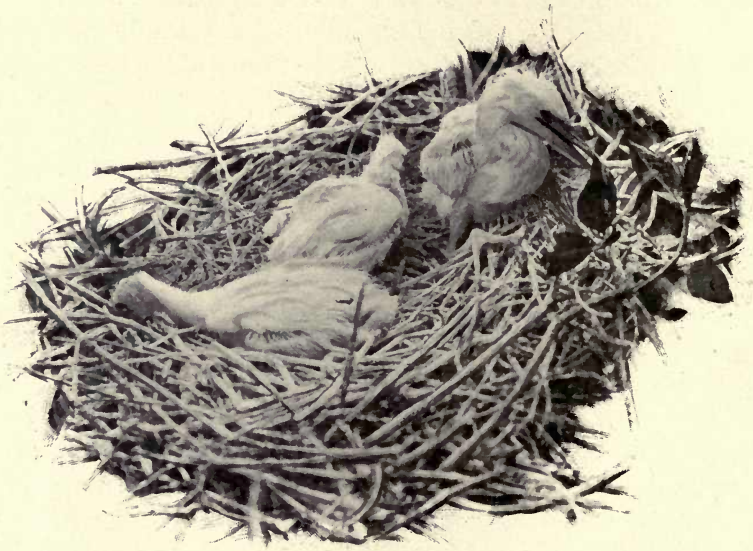
During the cruise we had watched longingly and carefully for a sight of the great rosy Flamingos. That pleasure was not for us. Small bands of the wary creatures are yet seen during fall, winter, and early spring. The last small flock was noticed by our guide in March. But it was now May, their nesting-time in the West Indies and the Bahamas, and thither all stragglers had evidently retired. We had now explored pretty thoroughly the only possible region in the United States where they could nest, and it can be safely assumed that this

splendid bird does not now breed within our limits, if indeed it ever did. Even Audubon never saw a nest.

The time had now come for our party to disband. All but myself had to return home, and were to keep on eastward in the schooner for Miami. It was my privilege to remain for further exploration. So that morning we said our farewells, and with one of the guides, in a frail little centre-board skiff with a leg-of-mutton sail, I started back on a fifty-mile beat to Cape Sable in a blustering west wind, across and down Barnes's Sound and Florida Bay. Indeed, we had a lively time of it, now drenched, then becalmed, by day studying birds and the formation of the curious mangrove keys, at night cooking supper upon some uninhabited key or projection of the mainland, eating in a smudge, and then seeking refuge from the fierce mosquitoes under our nets. On a certain peninsula where we camped one night the pests were simply unendurable. They settled upon the net literally in quarts, and, despite all care, many of them found their way inside. All night long they kept up an angry roar. In the morning when we crawled out they attacked us with so terrible an onslaught that we could not think of delaying for breakfast, but made sail immediately.

First and last I made a quite complete exploration of the more remote and inaccessible portion of the Florida Keys, where birds would be most likely to resort. I ascertained that most of the water-birds have been driven by persecution from the keys, and now breed on the mainland, in the morasses of the Everglades and the tangles of the great mangrove swamp, whither I followed them. Then it was I encountered the real hardships of the trip. While the cruise among the Keys had its inconveniences, it was a most interesting and delightful experience. The weather was mostly fine, with equable temperatures, the climate healthful, the quaint man-

grove islands interesting, the sea beautiful in its various hues, — emerald green, cobalt blue, milky white, — and there were still enough of rare and beautiful birds to maintain a constant enthusiasm and expectancy. Possibly the reality did not quite match the day-dreams, but as the years go by that cruise among the Keys of Florida will be among the brightest of recurring memories.



"NOT SO WELL-BRED WERE A TRIO IN A NEIGHBORING NEST"

"A PAIR OF SPLENDID WHITE PELICANS"

CHAPTER III

IN THE CAPE SABLE WILDERNESS

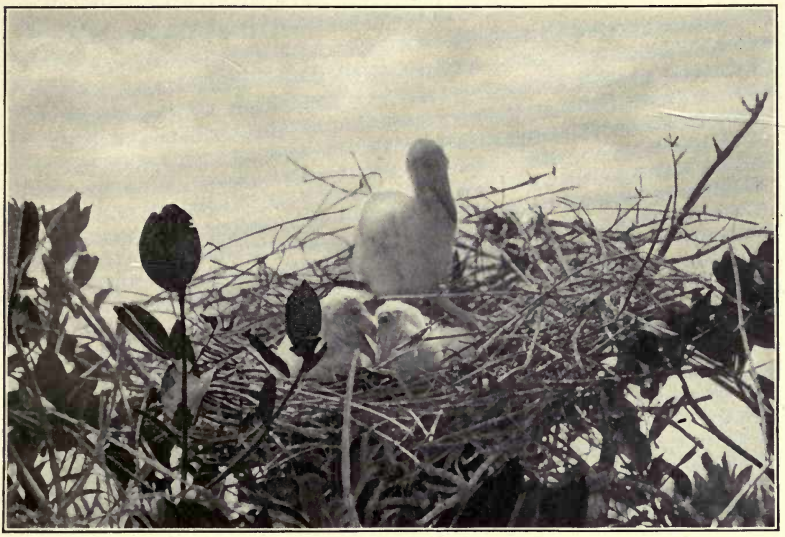
Soon were lost in a maze of sluggish and devious waters,
Which, like a network of steel, extended in every direction.
Over their heads the towering and tenebrous boughs of the cypress
Met in a dusky arch, and trailing mosses in mid-air
Waved like banners that hang on the walls of ancient cathedrals.
Deathlike the silence seemed, and unbroken, save by the herons.

LONGFELLOW, "Evangeline."

IT was a cool, sparkling morning, with a bracing northerly wind, the twenty-sixth of April, when we shoved the tender over the slippery "soap-flat," and, in boots loaded with the tenacious white clay mud, stood upon the southernmost tip of the mainland of the United States. An almost unbroken, unsurveyed wilderness lay before us, with all its interesting possibilities. A handful of settlers had taken up claims of government land along the shore, cleared a few

openings in the mangroves, and built their crude cottages or curious palmetto shacks. Back from the strip of timber on the shore is, near Cape Sable, a moderate area of marshy prairie, which is flooded in the summer rainy season. Aside from this, all the Cape Sable peninsula is a wild, tangled, pathless, swampy jungle of red and black mangrove, buttonwood, and other trees, extending back a number of miles to the open saw-grass marshes of the Everglades. In the embraces of this mangrove swamp lie a series of shallow lakes with muddy bottoms, connected together by various channels through the mangrove thickets, and more or less overflowed by the sea, when stormy winds pile the water up into the shallow bays. The whole country is as flat as a floor, and hardly above sea level.

Both of our guides lived here with their families in the wilderness, where they had taken up government land for fruit-raising close to the shore. One of them owned an uncompleted building, partly open on one side, which we found ideal for a camp and base of supplies. Leaving a guide and another settler to transfer our stuff from the vessel, and delaying only long enough to examine the nest of a Florida Red-shouldered Hawk with its one youthful occupant just able to fly, located in a strip of black mangroves near the shore, we struck inland with the other guide — Bradley, the game-warden of Monroe County — to visit a lake which lay several miles north through the mangrove swamp. There was no boat in the lonely lake, but the guide proposed to carry a canvas canoe. This we found hidden in the confines of the swamp. It weighed over fifty pounds, and, as we pushed on hour after hour through the maze of mangrove roots and tropical jungle, following a trail so blind that we often lost it, I was amazed at the strength of the hardy pioneer who carried it, a man of only moderate weight and size.



NEST AND YOUNG OF THE WOOD IBIS, BUILT ON THE TOPS OF THE MANGROVES

Taking an occasional rest, during one of which Bradley climbed to the nest of a Red-shouldered Hawk in a slender tree, bringing the one young hawk down for me to photograph, and returning it again to its home, about noon we were rejoiced to catch sight, through the trees, of the lake, which we began to fear we had missed. It was about a mile long, with densely wooded shores, a mere layer of water over a bed of soft mud. Up near the farther end we could see an islet with a lot of snow-white birds roosting on the trees. As we paddled out toward it in the canoe, several alligators appeared ahead of us, swimming desperately in their race for deeper water and supposed security. Now and then they would raise and turn their snouts to get an observation of our progress, then paddle away again. Poor brutes, they know that their hides are wanted for purposes not agreeable to them!

As we neared the island, I saw that the white birds were the great Wood Ibis, technically a stork, the American representative of that much-reputed bird of the Orient. Our bird is likewise an imposing creature that stands nearly as high as a man, clad in spotless white, save for the black extremities of the wings. "As for the stork, the fir trees are her house." Similarly is our stork apt to choose the immense cypress timber, where, in the interior of Florida, I have found them nesting over one hundred feet from the ground in inaccessible security. Here it was delightful to see them upon the tops of low mangroves, evidently a nesting colony. The great birds rose when we were at quite a distance, and circled far off over the swamp, together with a vagrant crew of buzzards. Meanwhile we could see a few Brown Pelicans fishing in the lake, and an occasional Black-crowned Night Heron, Louisiana Heron, or Anhinga with its snaky neck, flying across it.

As we landed on the muddy islet, densely overgrown with red mangroves, we heard the hoarse voices of young birds beyond us, that, in almost human tones, seemed to reiterate, "Get out! Get out!" It was not easy to transport the cameras over the treacherous tract, full of deceitful mud-holes, but after a struggle I arrived beneath the nests — large platforms of sticks, whitewashed and stinking, about fifteen feet above my head, built on the tops of the mangroves. Very soon I was overlooking them. There were eighteen, all told, within an area of a few rods, and each contained two or three young birds, pure white in color, about the size of large pullets, with heavy-looking bills. It was the first time in my life that I had looked into a stork's nest, and happy was I in the blazing Florida sun upon the mangrove-tops.

To photograph these stork homes proved to be a problem indeed. Built upon the topmost twigs of very slender trees,

almost bushes, it was hard enough to get one's head above them, to say nothing of a camera, and of course there was nothing to which to fasten the instrument. Finally I selected the most convenient trees, tied several of them together with some cord, and had the guide hold them up as I mounted and stood gingerly upon their tops, overlooking the nests,

YOUNG WOOD IBIS POSED FOR A PORTRAIT

but with nothing to hold on to. With no less care I hoisted up my ten-pound 5 x 7 reflex camera, and, thanks to the good light, was able to make successful snap-shot pictures of several of the nests. This being done, I descended safely, taking with me one of the young Wood Ibises, which I posed for portraits upon the ground.

Another small island was quite near by, where I should have

liked to hide for an hour or two, to secure pictures of the shy returning ibises as they alighted upon their nests. But already the day was waning, and we had the long, hard tramp before us. For want of time, another lake connected with this one was left unexplored.

How we suffered that day from thirst! We had been told that we could get fresh water here. But a combination of low water inland and high tides seaward had made the water brackish and poisonous. I became so parched climbing and photographing that I yielded to temptation, and was sorry enough, as for the next few days I lay in camp under a mosquito-net sick with dysentery and fever. It was about eighty miles, two days' sail, to the nearest medical aid, at Key West. Our vessel was gone, and another which we had engaged had not arrived. I seemed to be caught like a rat in a trap. But finally raw white of egg — a good thing to remember — checked the dysentery, and I was at length able to resume the exploration, though for a time rather weak.

A dry and thirsty land is Cape Sable, with all its swamps, overflowed as they are by the sea, and no drinking water to be had, save from the clouds. Our water-barrels were nearly empty; so one night, when a vessel had been secured, we dropped off the soap-flat and sailed westward around Cape Sable and up near "Middle Cape," where at last we found a tolerable well, from which to fill the casks. Along the "Capes" there are no mud-flats, but deep water extends close in to the fine beach of shell-sand. Here a chain of lakes approaches very near the coast, and we took the opportunity to explore them. The lone settler here kindly lent us his boat, a flat scow, propelled by poling. These lakes are the resorts of large numbers of the American White Pelicans, that usually breed in the far North. Yet I was not without hope that possibly we might find them nesting in this Southern wilderness.

"THE TRACT OF WOODS INTO WHICH RETURNING IBISES WERE DROPPING"

The first lake was quite a large one, several miles long. We poled past various little mangrove islands, starting numbers of Brown Pelicans and Florida Cormorants from some of them, where they were roosting upon dead stubs at their shores. Then we followed a narrow channel through the mangrove forest, the connection with the next lake of the series. White Ibises and Yellow-crowned Night Herons kept flying up before us to enliven the scene. Presently we came out into the lake. It also was very shallow, with bare mud-flats here and there, on which were scattered quite a host of birds. Conspicuous and noisy were a flock of Laughing Gulls. Less conspicuous, but even more interesting to us, were the shore-birds, which we found abundant both in this spot and elsewhere during the day. Right before us upon the flat a fine band of the large Black-bellied Plover, and around them a humble host of various sandpipers, Ring-necked Plovers, Dowitchers, and the like, were feeding, sedately or nimbly, as the case might be. But, dwarfing them into insignificance by physical contrast, there stood sleepily a pair of splendid White Pelicans, with bodies as large and plump as the roundest pillows of the daintiest couch. We landed just where we were, and I skulked with my camera along the shore, under shelter of the forest, till I was delightfully near the unconscious pelicans. I was almost ready for an exposure when away they went, alarmed evidently by the boat. They alighted about a mile off out on a flat, where I stalked them under cover of an island and secured some telephoto pictures of them, though at longer range than I could have wished. As soon as I showed myself they flapped heavily away.

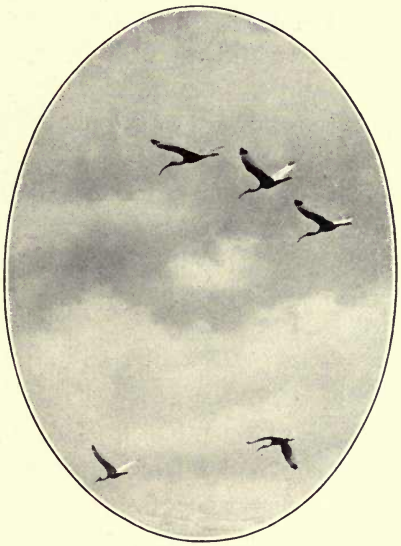
Thus we proceeded, visiting in all four or five connecting lakes, examining a number of islands, but without finding any rookeries of breeding birds, or seeing any more White Pelicans. These last were plenty here a month ago, but they had

now evidently departed for their Northern grounds, and there is no likelihood that the species ever breeds in Florida. Yet we were glad we had visited this chain of lakes. Hawks and eagles circled about, herons and ibises flapped along, shore-birds of many interesting varieties prodded the mud and whistled their piping notes. In fact, nature was so lavish that in one narrow place in the lake, between an island and the shore, two young tarpons, of fair size for eating, leaped out of the water and right into the boat, as though, with true Southern hospitality, to offer themselves for the pleasure and comfort of the visitors from the North. But, in an unlucky moment, I gave the larger one a push with my foot to get it out of the way, and imparted just enough impetus to enable it to spring out again into its native element.

Returning to our vessel, we sailed back as far as the extreme projection of Cape Sable, and anchored under the lee of the beach, opposite a fine grove of cocoanut palms. Here it was that another decided reverse overtook me. I was the first one awake in the morning, and was horrified at the sight which greeted me. In beaching the vessel to get the water-casks aboard, a serious leak had been started, and the floors, both in cabin and hold, were under water. And there were my two cases of photographic plates — alas! no longer "dry plates" — standing half submerged. Feeling almost sick, I spread the pasteboard boxes out on deck. About half were thoroughly soaked, others were damp, and about a third, those in the top layers, were all right. It looked as though my camera-hunting had received a severe handicap. However, I kept the damaged boxes out in the wind, and, when we reached camp, put them in a dry and airy place. To this treatment and to the fact that the plates were of brands whose makers in packing them separate their faces by strips along the edges, I owe the final saving of most of them. In many

cases the strips stuck to the edge of the film, but this did not seriously interfere with the usefulness of the plate. For future outings I shall always use plates thus put up, avoiding those packed with films in contact.

After the departure of the other members of the company, I camped for a week, with our guide, at our old headquarters. Poor forlorn country! Though the soil is suitable for the raising of tropical fruits, the lack of fresh water and the terrible insect scourge make it simply torture to stay there. Clouds of mosquitoes allow their victim not a moment's peace. One must wear thick clothes, and either don gloves and screen-hat, or fight all the time. In camp must be maintained a constant smudge, preferably of dead wood of the black mangrove, which "skeets" and man alike detest. The name of the pest is thus abbreviated in Cape Sable dialect, because it is the theme of themes, and it takes too long to keep saying "mosquito." Photographing under these circumstances is decidedly an ordeal. Settlers who pretend to any comfort at all screen their houses, and keep outside the door a brush of palmetto leaves, with which every visitor must beat off the stinging swarm before dodging within. Other settlers keep the smudge-pot going, and live in smoke. There are also swarms of a terrible great fly, an inch



WHITE IBISES IN "FLIGHT-LINE" FOR THE ROOKERY

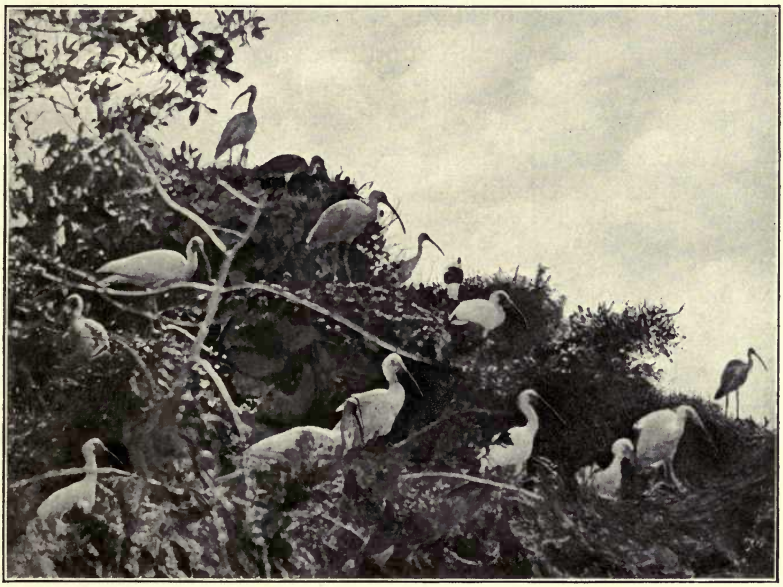
and a quarter in length, whose bite is like a knife-thrust, with a corresponding flow of blood. No domestic animal but the mule can support life in such a country, and that hardy animal only by being kept in a screened stable and bundled up in burlap when taken out to work.

One Sunday I attended a religious service in a building used as chapel and school-house. The women wheeled the children there in baby-carriages, under each of which was tied a smudge-pot. So the carriage rolled along, enveloped in smoke and an outlying cloud of "skeets" and flies. In the building smudges were going all the time, while the congregation slapped "skeets" and the children chased horse-flies.

One of my best and hardest excursions was made one day to a lake six miles away, or rather to its vicinity, for of the lake I saw nothing. A tipcart drawn by a mule swathed from head to foot in burlap, save for its eyes and projecting ears, — the most spectacular turnout it was ever my fortune to see, — took us half the distance. Then the guide and I walked three miles over an open grassy marsh. In one spot, by a mud-hole, he showed me the skeleton of a crocodile which he had killed some weeks before. Already we could tell the direction of the rookery from the bands of ibises of both kinds which flew up from the marsh where they were feeding and "lined" the way to the home-spot, bearing food for their young, as also did herons and egrets.

When we neared the edge of the lake, which was properly a sort of everglade morass, and tried to get to the swampy woods where the rookery was evidently located, our real troubles began, compared with which "skeets" were as nothing. Rivers of soft, treacle-like mud proved absolutely impassable. Finally we got across a wide ditch and encountered a tract of tall dry saw-grass, "snaky" and impenetrable. A match

was applied, and after the roaring sea of flame had passed, we went on. Then we encountered a tropical jungle, a solid mass of roots, vines, scrub palmettos, and the like. The guide went ahead and cut openings with a case-knife, through



WHITE IBISES. "THE TREES WERE FAIRLY ALIVE WITH SPLENDID GREAT BIRDS"

which we crawled. After half an hour of this came a saw-grass bog, an area of water and quaking tussocks, a quarter of a mile wide. How we ever managed to flounder across, dragging one another out of holes, I hardly know. But we reached, at length, the tract of woods into which returning ibises, herons, and egrets were dropping, and from which we could hear a confused murmur of distant squawking.

I shall never forget the sight that greeted me as I emerged from the tangle, and came to the edge of one of the impass-

able muddy bayous, about thirty feet wide, bordered by thickets of mangrove. The trees were fairly alive with splendid great birds and their half-grown young. The most abundant was the White Ibis, a fine creature, snow-white, with black wing-tips and brilliant red legs and bills, both long, the latter decurved. They are locally called "White Curlews," and are esteemed as one of the best and most abundant food-birds of the region. Their young are of a dark gray color, with white on the rump, and were now in the stage when, though unable to fly, they had left the nests. The woods were fairly alive with them. Droves of them raced over the ground under the mangroves or climbed among the branches in all directions.

Next in abundance was the little Louisiana Heron, the common blue-gray species with white under parts, whose young were in about the same condition as the young ibises, and mingled with them. Across the bayou we could hear, though not see, the large, graceful, snow-white American Egrets, and their young. As with the peacock, beauty of form and plumage is not matched with sweetness of song, and this lovely dream of a bird speaks in harshest, rattling grunts. Much the same is true of the elegant little Snowy Heron, of plumage as its name implies, a few of which we could see dropping into the woods beyond our muddy Jordan.

But what almost paralyzed me with excitement was the sight of half a dozen or so of large rosy-pink birds quietly perched upon the trees just opposite us across the barrier — the Roseate Spoonbill on its nesting-ground! Now and then a rosy apparition of flying loveliness would take the eye. What a spectacle, the dark green mangrove foliage dotted with ibises of dazzling whiteness, "Pink Curlews" (the local name), and blue-tinted herons! Here I felt I had reached the high-water mark of spectacular sights in the bird-world. Wherever I may penetrate in future wanderings, I never

hope to see anything to surpass, or, in some respects, to equal, that upon which I now gazed. Years ago such sights could be found all over Florida and other Southern States.

YOUNG WHITE IBISES AND LOUISIANA HERONS
(The three middle ones are Herons)

This is the last pitiful remnant of hosts of innocent, exquisite creatures slaughtered for a brutal, senseless, yes, criminal, millinery folly, decreed by Parisian butterflies, which many supposedly free Americans slavishly follow. Florida has awak-

ened to her loss, and imposes a very heavy fine for every one of these birds killed. Sincerely do I wish that every one who slaughters, or causes to be slaughtered, these animated bits of winged poetry, may feel the full weight of the penalty of the statute and of conscience. Such inaccessible tangles

YOUNG WHITE IBIS ON ITS NEST

of southern Florida are the last places of refuge, the last ditch of the struggle for existence to which these splendid species have been driven.

As long as I kept very quiet, the birds did not manifest much concern at my presence. Climbing a tree, to get above the undergrowth, I screwed my 4 x 5 camera to a limb and proceeded to take pictures of the surrounding birds, with

telephoto and with long-focus single lens. This being done, I took the large reflex camera for snap-shots and proceeded along the bayou, hoping to find some way to cross. Every time I tumbled into a mud-hole or snapped a twig there was wild confusion. The air was white with ibises. Crowds of

"CONTAINED FOUR YOUNG SNOWY HERONS"

young ibises and herons fluttered down from the sea of rude nests of twigs in the trees above and scurried and flapped across the mud, to get out of my way. By using caution I secured some snap-shots of these youngsters on the branches, and a few of some young ibis or other in its nest. More than one of the latter at a time I could not obtain, as some of the brood would always leave before I was near enough.

The day was now far on the wane, and yet we had not

crossed the bayou into the main part of the rookery. About four P. M. we reached a place where it came nearly to an end, and, thanks to a fallen tree, we managed to flounder across. The very first nest I examined, about six feet from the ground, contained four young Snowy Herons. While I was standing there, the queenly mother, exquisite with her back-load of elegant drooping "aigrette" plumes, flew down and fed her princely children. About twenty-five feet up the next tree, also a black mangrove, was another bunch of sticks in a crotch. A sort of pinkish flush around its edge led me to climb to it, and I gazed upon three young Roseate Spoonbills. They were perhaps a third grown, and were clad in a whitish down, through which pink feathers, especially on the wings, were growing. If the young herons were princely, surely we must call these royal, clad in what could pass for kingly "purple." A little distance away were a brood of young spoonbills, nearly grown, that were scrambling out of their nest. On the tree-tops around perched a scattered company of White Ibises, Louisiana and Snowy Herons, and the elegant pink creatures of the soup-ladle bill, looking down upon us in silent fear and protest at the intrusion.

My plates were nearly all used, but I expended the remaining few judiciously among the mass of wonderful material, taking briefly timed exposures with the smaller camera screwed up near the nests, and slow snaps with the "Reflex," with single lens, at the "Pink Curlews" upon the trees. Then the guide fairly dragged me back, despite my protests that I had not yet seen the nests of the American Egrets or of the Wood Ibises beyond. But it was very necessary to get out of that morass before sundown. After a hard struggle we succeeded in so doing, but with unspeakable regret on my part over what I was leaving behind.

If ever in my life I was thoroughly tired out, it was when, in

the dim twilight, staggering along with a back-load of stuff, we returned to our mule tied to the palm-tree. Poor beast, those Cape Sable horse-flies had reduced him to a sorry state, despite his suit of armor. His legs were dripping with blood, and he was so frantic with pain that it was at great risk that we harnessed him and avoided the flying hoofs.

SPOONBILL AND IBIS WATCHING THE INTRUDERS

Accounts which I have seen, by naturalists who have skirted the coast about Cape Sable and Barnes's Sound, describe it as "a forbidding and awful wilderness." The interminable swamp with its always impenetrable jungle of mangroves and other low trees extends to the very water's edge. To make a landing, one must wade a long distance through the sticky mud, and begin the ceaseless battle with the insect pests. During the summer it rains heavily nearly every day,

and the "skeets" and flies become so intolerable that even the few settlers leave for a time. Some day parts of it may be drained off and settled, but now as I voyaged past the wooded shores, save in a few spots out towards Cape Sable, there was no sign of human life, no voice to break the stillness but the squawk of some heron, the croak of the ibis, and the angry murmur of the venomous insect swarm. Who would seek out such a region unless impelled by the spirit of adventure and the love of the wild things that still find there a partial retreat from the encroachments of man?

YOUNG ROSEATE SPOONBILLS IN NEST

ADULT LITTLE BLUE HERON, FROM THE BOAT

CHAPTER IV

THE GREAT CUTHBERT ROOKERY

For this outrage I heard the poor bird
Say a thousand mournful things
To the wind, which, on its wings,
To the guardian of the sky
Bore her melancholy cry.

DE VILLEGAS, translated.

ABOUT fifteen years ago it was known to the plume-hunters that somewhere in the great mangrove swamp near the southern extremity of Florida was a very large rookery, or breeding colony, of herons, egrets, and other water-birds. Hitherto all efforts to locate it had proved unavailing — a fact which will surprise no one who has been even to the portals of that terrible wilderness. At length, an individual named Cuthbert, with a hardihood worthy of a better cause, made a business of tracing out this mysterious

rookery. Starting from the southern end of the west coast, probably somewhere on Whitewater Bay, he watched the flight of the birds, formed a conclusion as to the exact direction of their course, and plunged into the bewildering maze of the mangrove swamp. Carrying a meagre outfit and a light canoe, he slept among the mangrove roots where night overtook him. From time to time he climbed a tree and verified his course by that of the birds. Now and then he utilized one of the muddy, brackish lakes, and secured a few moments' rest, as he paddled across, from the worst of the innumerable hordes of mosquitoes that there make the life of man almost intolerable.

How many days he was thus engaged is not known, but at length, forcing his canoe through a narrow, overgrown channel from one of these lakes, which seemed to lead to some other body of water, he came out into a round, open lake, a mile and a half across. Out in the middle of it he saw a small island of about two acres, densely overgrown with mangrove trees, whose dark foliage was almost hidden under a canopy of snow-white birds, — ibises, herons, and egrets, — with others of darker plumage.

It must have been a beautiful and wonderful sight, a theme for the artist, a vision for the poet. But our plume-hunter was not that sort of a man ; the æsthetic side was lost upon him. Making a closer investigation, he found that the island was crowded by innumerable thousands of several kinds of birds, some of them the species whose plumage would bring the highest prices. There they were, the nesting-season at its height, brooding their eggs and feeding their young.

Did Cuthbert spread the joyful news among the Seminole Indians, the widely scattered settlers, or the outlaws that are in hiding in the swamps? Not at all. He pondered these things in his own heart, with a mercenary intent. The snap

IBISES AND CORMORANTS LEAVING THE ROOKERY. "MY FIRST PICTURE"

of his tiny Flobert rifle, inaudible a few rods away, attracted the attention of no wandering alligator-hunter. Weeks went by, and matters were very different upon the island. No bird now winged its way to the solitude, save hordes of Turkey Buzzards and Fish Crows. In the thousands of nests were swarms of flies around the decaying bodies of young birds that had starved to death. On the ground were reeking piles of the bodies of their natural protectors, each with strips of skin and plumage torn from its back. The rookery was, as the local term has it, "shot out." The buzzards were gorged and happy, and so was the brutal Cuthbert over his $1800 from the wholesale milliners, so the story goes.

Quite recently my friend and guide, the game-warden, had visited the spot, and, finding that quite a colony of birds had located there again, posted warning game-protection notices. Naturally I was anxious to visit this remarkable place, but had to let the rest of the party go there first without me, when I lay in the Cape Sable shanty ill from drinking swamp-water. But after they had returned home, I took the trip alone with the guide.

The first stage of the journey was made in a small open sail-boat, with a flat-bottomed skiff in tow, about twelve miles eastward from camp, along the coast-line, up into the shallows of Barnes's Sound. When the first-mentioned party went, a strong northeast wind had blown most of the water out of the sound, and they had to wade the "soft soap" mud and push the boat for no less than ten of the dozen miles. We were more fortunate in having water enough for sailing; but the wind died out to a flat calm, so that we had to row. About midnight we anchored off opposite our destination, slept on some planks across the thwarts, and pulled the sail over us when the rain came down. In the morning it still showered, and we hesitated about pushing up into the

mangrove swamp, but at length the clouds began to break, and we decided to go.

We left the large boat anchored near the shore of an inner bay, and in the skiff, with blankets, and provisions for several days, approached the mangrove thicket which lined the shore. No opening whatever was visible, but, on pulling apart the branches with our hands, we could see a narrow stream of water flowing out into the sea. The branches closed behind us, and we were in the meshes of the mangrove swamp. The channel was just wide enough to float the skiff. Branches met overhead and shut out the sunlight; tangled roots and snags reached everywhere through the water, across which trunks or limbs had grown or fallen. Some of these had been chopped out previously by the guide, so our task was easier. But by the time we had sculled and paddled, poled and dragged the boat for seven miles over and under obstructions, with an occasional respite in crossing one of the chain of small lakes before entering the next overgrown channel, we were glad enough to see the desired lake open up before us. There lay the famous island, not altogether white with birds, yet with enough of them in evidence to verify the wonderful tales I had heard. A good many birds were visible upon the tops of the trees, and there was a constant procession to and from the island.

We ate dinner out on the lake to avoid the clouds of "skeets," then cleared a spot for a camp in the mangrove swamp on the shore nearest the island, after which we pulled for the rookery. The nearer we approached, the more birds we could see, some white, some black, and others of intermediate shades. I sat in the stern with the reflex camera in my lap, the slide withdrawn from a 5 x 7 plate, and the focal plane shutter set for one five-hundredth of a second. The sky was well filled with broken clouds, through which the sun shone

unsteadily at intervals. When we were within a few rods of the island, the guide thumped an oar upon the thwart, and quite a cloud of White Ibises rose from the nearest mangroves, and gave me my first picture of the inhabitants of the

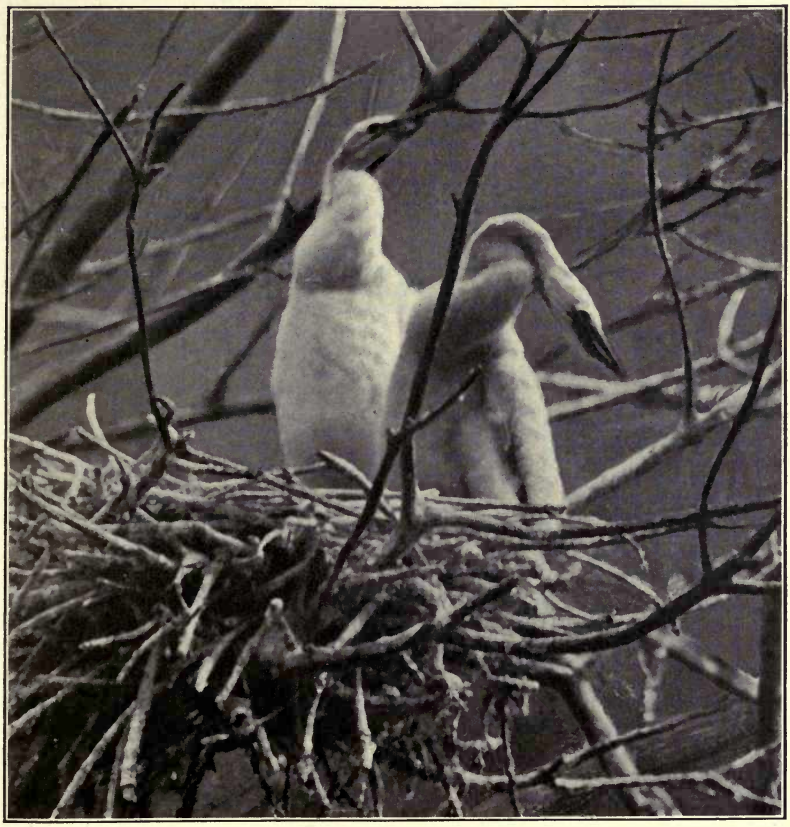
"ANOTHER LOT OF IBISES STARTED UP"

rookery. Just as I was ready for the second shot, another lot of ibises started up, with a few of the beautiful snow-white American Egret. This was upon the west side of the island, where most of the ibises seemed to be located.

We now rowed round the island, south and east, keeping close in. A few rods farther, and a lot of great black Florida Cormorants began springing and fluttering from the low mangroves, to fly out in bands over the lake and alight out in the water. A little farther along, numbers of Little Blue and Louisiana Herons began to start up, and then, with a tremendous flapping, out past us would come an Anhinga, — the curious "Snake-bird" or "Water Turkey" of the South, — its slender, snake-like neck outstretched, and the long tail spread out like a great fan. One of them, surprised by the boat near its nest, appeared completely terrified, and fell to the water, along which it went beating and fluttering past the boat. This was on the east side of the island. On the north side we began to start the ibises again, and soon completed the circuit.

Once more round, and I had a goodly number of hopeful snap-shots to my credit. Then we landed on the northern side, running the boat up into a sort of little bayou. Over us arched the tangled branches of the mangroves, which grew out into the water from the low, muddy shore. Every step was attended with alarm and confusion. The trees, not over about thirty feet high anywhere, were filled with nests in almost every crotch. The owners scrambled away, squawking in their fright, — Louisiana Herons, White Ibises, and Anhingas, at this point. Young herons seemed to be everywhere, pretty well grown, and were climbing and fluttering from branch to branch.

The first nest that I especially noticed, close to the boat, and only ten feet above the water, held four young Anhingas, perhaps half-grown, clad in suits of buff-colored down, with some dark feathers sprouting on the wings. It was a fine subject for the camera, and I proceeded to climb a neighboring tree. As I did so, one of the youngsters dropped head-



YOUNG ANHINGAS. "THE COVETED OPPORTUNITY"

long to the water beneath, and disappeared. I could see it swimming off below the surface. Another climbed out of the nest among the branches. But the other two stayed and let me drive my screw-bolt into a limb, and set up the camera. One bird kept perfectly still, but the other expended its energy in darting its neck back and forth at me in serpent fashion, and without cessation, an annoying

action, as the nest was shaded, and required an exposure of at least a second, even with wide-open lens. It was quite a while before I secured the coveted opportunity, and could proceed to photograph another brood of young Anhingas just beyond.

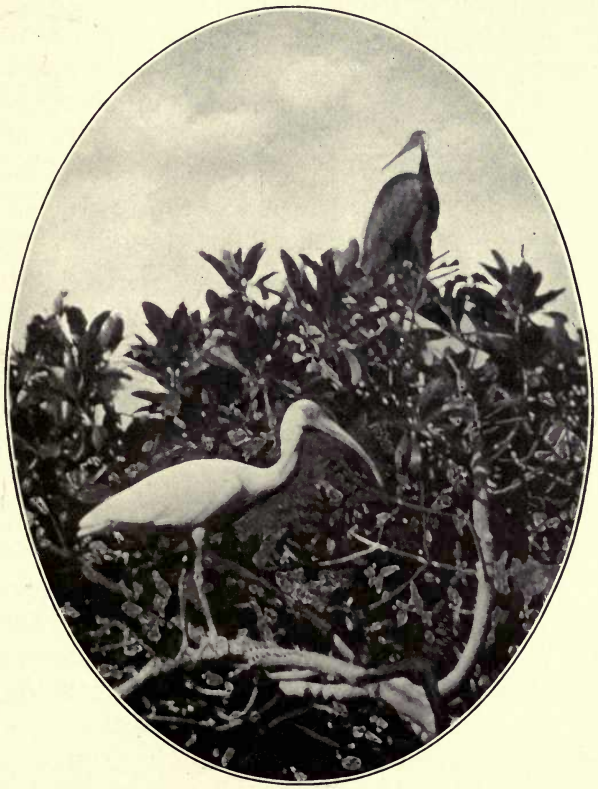
A few steps brought us to the west side of the island, where the White Ibises were nesting by hundreds in an area of rather low mangroves growing out of the water. Every movement on our part caused an uproar of croaking notes and beating of wings. Especially ominous to them was the snapping of a twig, possibly suggesting the report of the small rifle of the plume-hunters, though it may have been merely the nervous effect of any sharp sound. The ibis is a beautiful bird, with its snow-white plumage, contrasting with the black tips of the wings and the dark carmine red of the long bill and legs. With hundreds of them starting all about me, and passing and repassing overhead, the effect was something beyond all words to describe.

Fortunately the ibis, though timid, is not very wary. The trees were so thick that it was very difficult to find a place open enough to see the birds at rest. But I found that by keeping quiet, sheltering myself somewhat in the undergrowth, the ibises would light fairly near me. So I erected my smaller camera upon the tripod, with the telephoto attachment, and secured some pictures of single ibises amid the thick of the mangroves.

A little farther along, on the south side of the island, was the only real opening in the trees. Here, fortunately for me, was a dead tree, upon which several ibises at a time would alight. A Louisiana Heron stayed perched on a leafy branch just above, and here I was soon able to take quite a series of telephoto pictures of ibises and the heron. Shortly before starting on the trip, I had purchased an excellent firm

tripod, which now served me admirably, as rigidity of the apparatus is the prime essential in telephoto work.

All the nests of these water-birds are mere platforms of sticks in a crotch, usually unlined with any soft material. The ibises, however, line their nests with green mangrove leaves, but, despite this, their nests are the flimsiest of them all. Just a few sticks are laid across one another in the crotch, some leaves are placed upon them, and the two or three greenish eggs, beautifully mottled with brown, are then

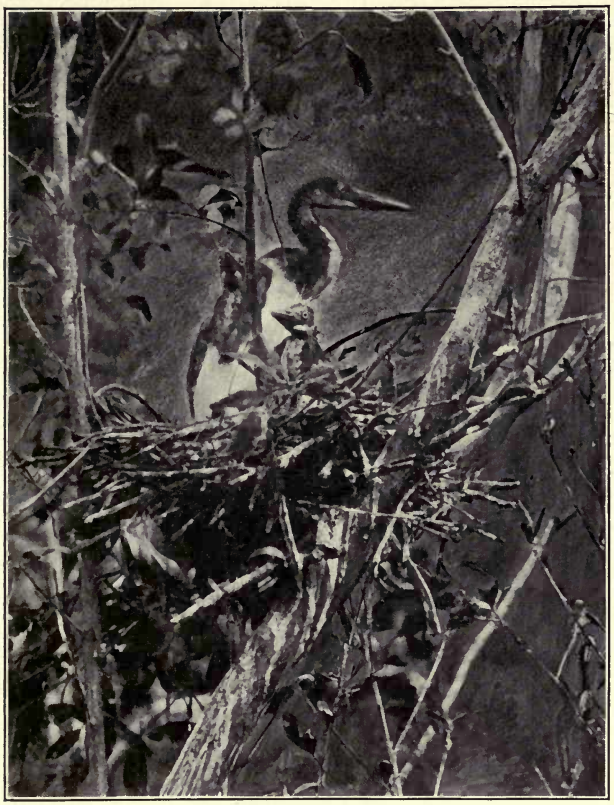


TELEPHOTO PICTURE OF AN IBIS AND A LOUISIANA HERON

deposited. All the eggs of the ibises seemed to be fresh, and many of the sets yet incomplete. In view of finding, in the other ibis rookery visited, the young already well grown, I am inclined to believe that these ibises may have recently come to this island from some other rookery, that had been broken up, and were trying to raise belated broods.

YOUNG FLORIDA CORMORANTS.

While I was among the ibis nests, a harsh series of rattling grunts arrested my attention, whose author I found to be an American Egret, that flew back and forth over me, and then alighted in a tree-top to watch. It was a most beautiful sight, the tall, slender white bird, with long, graceful neck, and a back covered with the elegant "aigrette" plumes that drooped down over the wings — the prize of the merciless plume-hunter. Here was the nest, about fifteen feet up a mangrove. In it were three little egrets, rather ragged and uncouth in their incipient white plumage, yet quaint and interesting. Not far away were several other nests of this species, all containing two or three young. Two weeks before, the rest of my party had found a few nests with eggs, but now all were hatched. One family of three young were large enough to fly a little, and could just flutter from tree to tree, out of my reach. Another brood of two were at the climbing stage, but I drove them back to the nest, and managed to photograph them with the reflex camera in the open sunlight that bathed the tops of the mangroves. The eggs of the egret are light greenish blue, like most herons' eggs.



LOUISIANA HERONS. "YOUNG IN THEIR RUDE HOME"

Out near the edge, on the very tops of the trees, were the nests of the Florida Cormorants, rather more compact than most of those of the other birds, but especially dirty. Some of them held from two to four dirty-white eggs, but in the majority there were small, naked, black young, repulsive in appearance. They lay squirming in the nests unable to stand or sit up, and suggested reptiles rather than birds. In only one nest were there young large enough for successful photo-

graphs, and this nest was very inconveniently situated. The only way I could manage was to balance myself on the slender branch close beside it, and take snap-shots, there being no possible place to attach a camera. Around me in the tree-tops were several other nests with tiny young. Noticing that one brood were beginning to succumb under the sun's rays, I covered those near me with leaves till I had taken the desired pictures. The mother cormorants were quite solicitous, alighting quite near me on the tops of the trees, and I secured some pictures of them.

Everywhere I went there were varying numbers of the nests of the Louisiana Heron scattered about. Some of these contained eggs, curiously in this rookery almost always three, whereas the year before in central Florida I invariably found four or five to a nest. Whenever the young herons were large enough to stand up, they would usually scramble out of the nest when I tried to photograph them. It was only with much difficulty that I finally succeeded in securing a picture of a whole family of young in their rude home. I also caught a well-grown youngster, and placed him upon a horizontal trunk, the guide thwarting his determination to escape until I had taken his portrait several times.

I also inspected the comparatively small colony of the Little Blue Heron along the eastern shore of the island, where they nested in the mangroves out over the water. Four blue eggs was the usual complement of their nests, or varying numbers of young. At first the young of this species are pure white; then slaty-blue feathers crop out; but it is not until their third summer is near that they don their complete dark bluish uniform. One poor little white fellow had fallen into the water, and was nearly chilled and exhausted when I found him. I put him back into his nest out at the end of the branches, and set one of his dry and contented brothers

upon a firmer branch, where he stood very sweetly for his picture. I also secured pictures of the adults in flight or upon the trees, from the boat.

Upon their previous visit here, my friends had seen twelve of the elegant Roseate Spoonbills flying about, and had examined a few nests, containing either three large eggs beautifully blotched with lilac, or the downy young of very

YOUNG LITTLE BLUE HERON. "STOOD VERY SWEETLY FOR HIS PICTURE"

tender age. Now they were all gone, their nests being plundered by crows or buzzards. The only trace of them I found was a single spoonbill's egg in an ibis's nest, with two eggs of the ibis.

The Fish Crow and the Turkey Buzzard represent the predatory forces which are allied with man in waging war upon

these colonies of helpless water-birds. Though I did not actually see the buzzards looting the nests, I am sure that these solemn-looking, red-faced fellows do not hang around the rookery for any benevolent purpose. Yet their ravages are not as open and unblushing as those of their smaller companions. The Fish Crows are nothing if not audacious thieves. A band of them was always prowling about our camp to appropriate whatever they could. When we pulled across to the rookery in the morning, they would descend and eat up all leavings, and then, by the time we were reaching the island, the black band would come straggling after us, following up closely as we landed. It was inevitable that some of the birds would be startled from their eggs, and this gave the rascals their opportunity. The audacity with which one would alight over our heads in the nest of a heron or ibis and proceed to break and suck the eggs was simply maddening, as there was no way to prevent it. Now and then we would see one fly off with an egg impaled on its bill. The warden thought it would be a good thing for him to carry a small plume-hunter's rifle on purpose to kill crows and stop their ravages.

When I was photographing the young cormorants, one of these Fish Crows kept hovering close around me, with an evident desire to get at the young. I had no lead with which to perforate his hide, but I shot him with a photographic plate and got his likeness, perfect to his very claws.

One of the minor, yet very interesting exhibits in this remarkable aviary of Nature was a party of six of the rare and little-known Everglade Kite, probably a family group, which I saw one evening soaring over the island. Very few naturalists have ever seen this bird. It quite closely resembles the Marsh Hawk in form and general habits, and, like the young of that species, is dark in coloration. The southern edge of

CORMORANTS, IBISES, AND A HERON. "FLUTTERING FROM THE LOW MANGROVES"

the great open, grassy quagmires of the Everglades is only a few miles from this spot. These marshes are the main resort of this bird, which is often called "Snail Hawk," because it is said to feed almost exclusively on an abounding species of fresh-water snail, extracting the creature from its shell by means of the hooked bill. There were plenty of these empty snail-shells about, upon which, very probably, these kites had been feeding. As they soared, — the whole six quite close together and rather low over the island, — though the sun had gone down, I secured some tolerable snap-shot silhouette pictures of the interesting party.

The only other feathered visitors to the rookery which we noticed were a few straggling Wood Ibises and Ward's Herons. But there were some gentry with leathery hides which were too interesting to be neglected. The lake was a great place for alligators, and we often saw them floating on the shallow, muddy water, quite near the shores of the

rookery, upon which, doubtless, they often crawled out. One of them furnished us not a little amusement. There was a flock of six American Coots, or Mud-Hens, feeding a little way out in the lake, near to where we had retreated in the boat from the mosquitoes to eat our dinner. The wily old fellow had evidently seen the coots, for he kept diving and emerging nearer and nearer to them. The water was too shallow for him to catch them from beneath, so when he had come reasonably near, in line with the course they were swimming, he lay perfectly still upon the surface, looking like an old root or snag. Unwittingly the coots fed along till they were perhaps within ten yards. Then they noticed the 'gator, but apparently were not sure what it was. Ceasing to feed, they swam close together, and really appeared to be holding consultation, in some way. Finally one of them started off, the rest looking on, and swam up within a few feet of the object. There it stopped and studied it, turning its head from side to side, to see it out of either eye. Finally it swam back to its companions, and appeared to communicate something, for they turned and swam off in the direction from which they had come. The guide told me that the 'gator's way would have been, had they come within range of his weapon, to swing his tail around with a great slash and break their necks.

Naturally we made some attempt to form an estimate of the bird-population of this great rookery. The Louisiana Heron was the most abundant species, and may have had from fifteen hundred to two thousand nests. Next would come the White Ibises, with well toward one thousand pairs or nests; then Florida Cormorants with about two hundred, Anhingas and Little Blue Herons with about one hundred each, and the American Egrets with only about twenty, with half a dozen pairs of Roseate Spoonbills when the other party

A VISION OF CUTHBERT LAKE, WITH AN ANHINGA

made its visit. This would sum up about three thousand nests or six thousand birds.

This account is a summary of my observations during the time of our stay, from Tuesday to Thursday afternoons, May 12 to 14. In some ways it was the most enjoyable and exciting two days of my life, even though I had not yet got back to full physical condition. But the mosquitoes in these swamps are something dreadful. I managed to endure their unceasing attacks as I photographed, but I found that changing sixty plates, of two sizes, dusting and refilling the holders, out in the open swamp in the dark, was an ordeal in which I almost lost my nerve. The insects were so numerous I could not avoid mashing some of them between the films in packing the plates.

We spread our blankets among the mangrove roots in as dry a spot as we could find, hung our nets between the trees, and camped out in the fullest sense, without tent or other shelter. When we came in from the rookery, the guide built a smudge and cooked supper, while I donned a screen-hat and gloves and tried to get a few moments' peace. After supper it soon became dark enough to change plates, and later I joined the guide under the net, by the smudge, and tried to sleep. The first night was showery, and as I lay there, many a mile from another human being, half sick to begin with, feeling the rain splashing in my face, listening to the roaring hum of the insect scourge around the net, and the occasional scream of some wild animal, perhaps a panther, off in the swamp, I felt — as my guide on the Western prairies once expressed himself under similar conditions — that it would not take much more to make one homesick!

On Thursday morning the guide awoke ill with a bilious attack. So I finished up my work during the morning, and after dinner started back for camp. Without the guide I am

sure I could never have found my way out of that swamp, even after being conducted in. The leads off into the jungle, and from lake to lake, were as blind as though no human being had ever traversed them. When we had fought our way out to the sea, and had put sail on our boat, I was thankful. There was a head wind, and I beat the craft homeward, while the guide — poor, faithful fellow — slept off his headache and nausea.

It was one A. M. before our journey was over, and tired enough we were. None but thorough-going enthusiasts should, or probably would, venture upon such a trip as that to the Cuthbert Rookery. It was about the most arduous thing I have ever attempted, but I would not have missed it for a good deal. Think of staying on a two-acre islet in a wilderness lake amid six thousand splendid breeding birds! I may dream of it with exultation when, in a degenerate day, the Florida rookeries are, like the buffalo herds and the Great Auk, but memories of the past.

"ONE OF THESE FISH CROWS KEPT HOVERING CLOSE AROUND ME"

SOOTY TERNS. "THEY SETTLE DOWN UPON THE SAND"

CHAPTER V

ON LONELY BIRD KEY

As the chain grated the ear, I saw a cloud-like mass arise over the "Bird Key," from which we were only a few hundred yards distance. . . . On landing, I felt for a moment as if the birds would raise me from the ground. — AUDUBON.

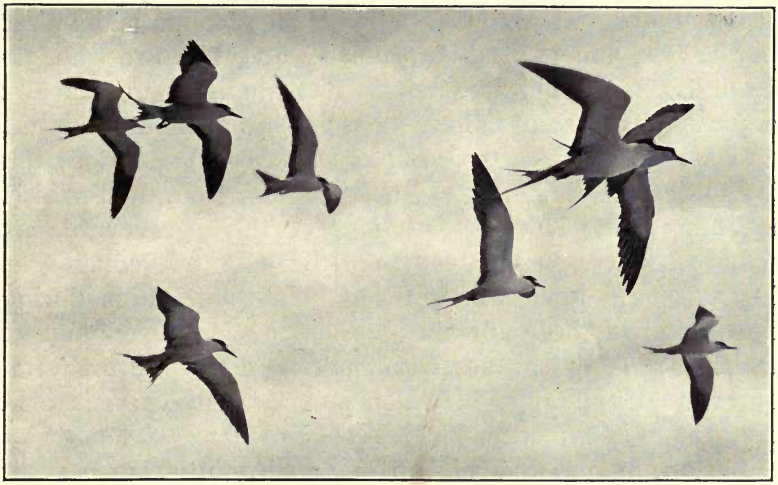
OUTSIDE of Alaska, it would be hard to find a more desolate or isolated region in our national domain than the Dry Tortugas. Far out in the Gulf of Mexico, sixty-five miles from Key West toward the setting sun, rise half a dozen barren sand-bars from the exquisite turquoise-blue waters of the Gulf. One of these, Garden Key, has been appropriated for a government fort and coaling-station, and from the massive walls of Fort Jefferson the exiled marines gaze wistfully across the sparkling waters, white-capped by the brisk trade-wind, toward their Brooklyn Navy Yard Jerusalem, and count up the remaining months

of their pilgrimage. The only other human inhabitants are the family who tend the light upon Loggerhead Key, our last outpost toward Cuba and Panama. Other islets are untenanted, save when the great sea-turtles "crawl" to deposit their numerous eggs in the sand, on moonlight nights of June; one alone is preëmpted by the birds.

On the eighteenth of May, breaking camp and beating back the angry swarm of Cape Sable "skeets," I started out across Florida Bay in the little mail schooner, sailed by a daring "Conch," or Bahama Islander. With a driving north-east wind, directly aft, we scoured along over the white-capped expanse. In surprisingly short time we had passed Sandy Key, of Audubonian fame, and sunk the Capes of Florida. From time to time inky clouds closed in around us with their dark pall, amid furious bursts of rain and angry squalls which threatened to take the sticks out of the schooner and sent waves a-chasing us in a manner that made me fear for my hard-earned camera trophies of the wilderness. By late afternoon we had crossed Florida Bay and were making a splendid run through the mazes of the outer keys, mangrove-clad, that rose like dark forts on all sides of us. Then it became pitch dark, and I was amazed at the way in which the genial old "Conch" rammed his craft through all sorts of intricate channels, hitting bottom now and then, yet somehow getting through, until, when within five miles of Key West, at nine o'clock, we plunged on to a shoal between two keys, and stuck hard and fast. I passed a rather chilly night, in mackintosh and rubber boots — head under the cuddy and legs out in the wet. Early in the morning the rising tide cleared us, and by six A. M. we were at the wharf in Key West, just in time to meet one of my former guides, Mr. Burton, and secure passage upon the government tug which was about to start for the station at the Dry Tortugas. The

guide had received an appointment as game-warden, to camp alone on Bird Key and protect the feathered multitudes through their nesting-season, now beginning.

It was an elegant bright day, with the usual fresh north-east trade-wind. We reached the fort early in the afternoon, whence, through the kindness of the keeper of the light-



SOOTY TERNS. "ALONE AMONG THE BIRDS"

house on Loggerhead Key, we secured passage to Bird Key, only a mile away, in a small sail-boat, with our skiff in tow. He left us, bag and baggage, upon a dilapidated little pier, alone among the birds. As we had approached the islet, the chorus of shrill cries had grown louder and louder, and the fluttering of wings more and more apparent. Now birds were rising into the air in countless swarms, with outcries that were almost overpowering in their shrillness and volume. We had fairly to shriek at one another to be heard at all. It was Tuesday, and until the next trip of the tug, on Saturday

morning, I was to enjoy and make the most of this remarkable spot.

The first thing to do was to get settled in our strange quarters, which were in rather uncanny surroundings. Bird Key has something of a history. Many years ago Audubon landed here and studied the great bird colony. During our Civil War the key was used as a Confederate prison-camp. It is perhaps an eighth of a mile long and about a hundred yards wide, a mere sand-bar, pretty well overgrown with bay cedar bushes from three to six feet high. There are also a few small cocoanut palms, some patches of Bermuda grass, and a species of cactus. Better than Key West does this island deserve that name, — a corruption from the Spanish, meaning Bone Key, — for it is a veritable graveyard, not only of soldiers, but of victims of the "Yellow Jack." The key was used for a yellow fever quarantine station during the period of the epidemic of 1899, the visible remains of which, beside the graves with their rude slabs, are several untenanted buildings, in which sulphur and carbolic acid are greatly in evidence.

Bestowing our goods in an outer entry, utilizing a rusty stove in the cook-house, sleeping on a piazza, being careful to boil the water we used from the neglected cistern, we made ourselves comfortable, and found constant opportunity for bird-study by day and by night. Even from the windows and piazzas of the buildings we could watch the birds sitting on their nests or flying to and fro, and in every waking moment listen to their cries.

Under three species of birds are included all the regular inhabitants of Bird Key; in fact two kinds will embrace all but about two dozen individuals. These abounding sorts are the Noddy and the Sooty Tern, both being birds of the tropics, which are found nesting only at this one spot in all

the United States. Each is about the size of a pigeon, slender and graceful, with rather long, pointed wings. The Sooty Tern is deep black in its upper plumage and snow-white below, while the Noddy is dark brownish gray all over, save for a whitish cap on its head. The Noddy reminds me of photographic negatives of our common terns of the North, which are of the reverse shades of color, so that I had the constant feeling of being in a strange part of the world where the accustomed order was upset, as though antipodal Chinamen were walking on their heads, and white were here black.

The Sooty Terns form the great majority of the population of Bird Key. There are such clouds of them that accurately to estimate their numbers was impossible, but my guess of six or eight thousand I think cannot be far out of the way. Of the Noddies there are hardly a thousand, which is a

THE NESTING NODDY. "A CASE OF LOVE AT FIRST SIGHT"

great decrease from the numbers that were once here. These two species alone breed on the island. Its only other frequenters are about two dozen great Man-o'-War Birds, which loaf about, sunning themselves, upon a certain tract of bushes, the wharf, or the beacon, when they are not floating serenely in the air or pursuing and robbing the terns as they come in with the food secured in their trips out to sea each morning and afternoon.

Though the climate is warm throughout the year, it is not before early May that the feathered hosts arrive from the south at this sandy rendezvous. In the van come the Noddies, only a few at first, but the rest within a few days. A week later the Sooty Terns pour in, and it is said that within a week of their arrival both kinds begin to lay. At the time of our coming, nearly all the birds had eggs and were devoting themselves to their family cares.

To reach the buildings from the little landing-pier, we had to pass through a tract of bushes, and here it was that I saw the first nests of the Noddies. Upon the tops or in the forks of the bushes each pair had built a rather rude, yet fairly substantial platform of sticks, only slightly hollowed, and upon each sat a dark gray bird. There was something about the graceful little creatures that instantly took me by storm, — a case of love at first sight. The Noddy is wonderfully like a dove, in size, in form, in the softness of its plumage, the expression in its large, dark eyes, and its gentle, confiding ways. There is no wild affright and fluttering as the stranger approaches. Just a shadow of natural modesty is evident, but the birds sit quietly, hoping and trusting, and do not fly until the intruder is almost within arms' reach. Then they flit easily away, waiting upon a neighboring bush until the interloper has withdrawn, when they return directly to their charges.

SOOTY TERNS. "THOUSANDS OF WINGS ARE FLUTTERING"

Here, too, at the outset, we began to see the manner of life of the Sooty Tern. Their homes are never on the bushes, but on the ground, either under shelter of the foliage or out in the open spots. Home-making is reduced to the lowest terms; merely a hollow scratched in the sand, and all is ready. It seems strange that both these species lay but one egg. If robbed, they will lay again and again, but each pair raises only a single chick each season. This is one of the

MAN-O'-WAR BIRDS AT THEIR ROOST
(One is still asleep)

wonderful adaptations of nature, that the birds which have few natural enemies should have small families, while those much persecuted — like ducks and grouse — have large broods. The eggs of both these terns are about two inches long, of a buffy white, with reddish markings, but are distinguishable in that those of the Noddy are less marked, though the situation, upon ground or bush, makes the matter certain. Very rarely the Sooty Tern has two eggs, but I never found more than one in the possession of a Noddy.

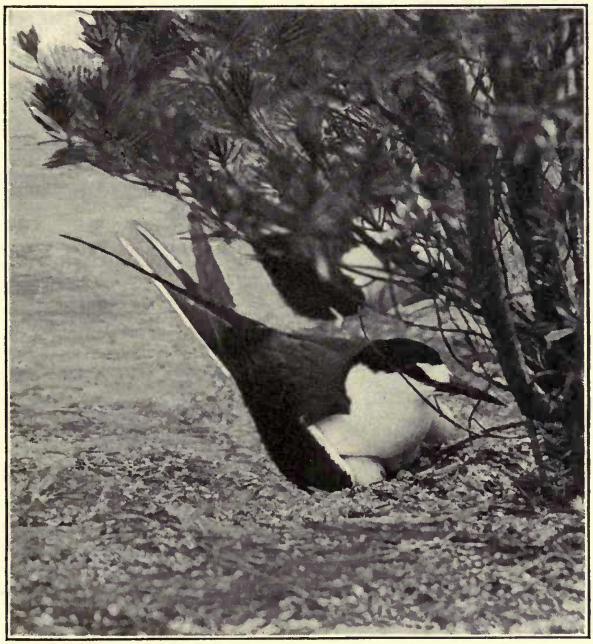
I soon found that, for breeding purposes, the two species had apportioned off the island into separate communities.

The Sooties, naturally, occupied the greater part of the island, but the Noddies had a separate reservation along the middle and southern part of the west shore, from which one gazes out upon Loggerhead Light, two miles away. To some extent the species overlapped on their southern boundary, and the Sooties were free to fly over Noddy-land, but there was no interference or unfriendliness. I saw no fighting between these two, though the Noddies would protest a bit when their natural disturbers, the Man-o'-War Birds, desired to roost too near their nests, and there were some little "scraps" between some of a kind, especially when the wrong Noddy alighted upon the wrong nest.

Living, as we did, right among the birds, the opportunities were splendid for observing all the details of their interesting little lives. Both terns were continually alighting upon the roofs of the buildings, especially appropriating the ridge-poles, upon which there were nearly always lines of them, both kinds peacefully intermingled. I watched the caressings of the mates, their pretty home-life on and about the nests, and even the dropping of the eggs. I was so busy photographing during my short stay that I could not take time to watch protractedly any given nests and learn the full sequence of events, but I should have enjoyed remaining there with the warden throughout the season, watching the life and progress of the colony.

The climate of these sea-girt, Southern keys is not uncomfortably hot, even in summer, just a delightful, equable condition that makes living and sleeping outdoors a constant delight. The rainy season was approaching, as occasional sudden showers had begun to show. But who would mind alternate showers and sunshine under such conditions! How a congenial company of lovers of nature could enjoy themselves upon such an island, studying the birds, watching at

night for the "crawling" of the great turtles, bathing in the limpid waters of the Gulf, upon the warm sandy beach gathering curious sea-weeds, bright shells, sponges, and corals, reading, forsooth, — as did my companion aloud to me from



SOOTY TERN OVER EGG

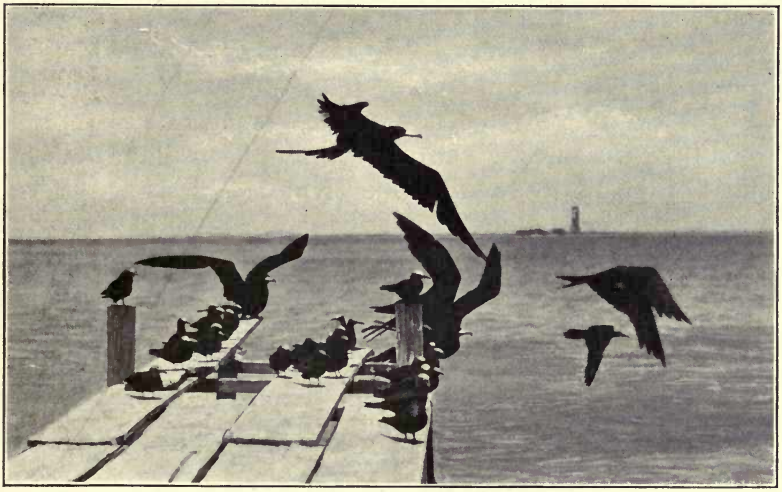
the poems of Longfellow, as we sat at dusk looking out upon the sea and watched the Man-o'-War Birds soar and the terns come back with edible tidings from afar, — and at night, free from insect annoyance, — for there are few mosquitoes on the Dry Tortugas, — be lulled to slumber on the open porch by the weird cries of the birds! This is living, indeed!

Had it not been for the Sooty Terns, this lone key would have been a quiet spot. The great Man-o'-War Birds, seem-

ingly adapted by nature for stentorian vocal efforts, are practically mutes; the Noddies, also, seem to have no note other than a weak little croak. But the Sooties make up for all other lacks with their clarion calls. Even when wholly undisturbed, their natural nervousness makes it impossible for them to be quiet. The great host is continually engaged in some alarm. By thousands they settle down to their nests or upon the sand. Some individual quarrels with another, and rises with an angry scream. A few neighbors do the same, and then, with a furious uproar, thousands of wings are fluttering, and thousands of voices unite in a tremendous shout that well-nigh shakes the key upon its coral foundations. The racket, at length, seems fairly to frighten the birds themselves, and suddenly every voice is hushed in an absolute stillness which seems for an instant even more startling and appalling than the previous din. But this is only for an instant; again the hubbub breaks forth, if possible with redoubled power. All day long this goes on, and the visitor becomes accustomed to it, though he feels that he is becoming deaf, losing the power to distinguish minor sounds.

At dusk there is a general let-up, and most of the birds settle down to rest. Yet there are always some a-wing, and hardly a moment will pass without some sort of a cry. But now it is only an individual voice that is heard, instead of a vast chorus. As we lie under our blankets on the piazza, watching the twinkling of the Loggerhead Light, the dim form of a Sooty suddenly dashes past the gable, and with a resounding scream it is gone, like a waning meteorite, perhaps to be followed by a Noddy, with its comical little squeak of a voice. But soon no sounds can longer keep us awake. At daybreak the clamor begins, and we, too, are astir. The skilful guide soon prepares a steaming and bountiful repast, and again I am out with the camera among the birds.

The first thing to do is to photograph the Man-o'-War Birds. They have been sleeping on some clumps of bushes, in pretty close company with us. We do not see them go to bed, for at dark they are still soaring; but in the morning we find them quietly roosting, some of them not more than thirty or forty feet from our couches. They are late risers,



THE LITTLE PIER. "THE NODDIES AND MAN-O'-WAR BIRDS LOVE TO ROOST ON IT"

and sit there sleepily till some time after sunrise. So I quietly set up the camera upon the tripod, with the telephoto attachment, and get what views I wish, without alarming them, right from my very bed!

Now we will stroll to the northern end of the island, looking toward the fort, where the Sooties are very numerous. They are nesting all over the dry sand above the beach, and everywhere under the bushes farther back. As we approach, they rise in astonishing numbers. The sun is yet low in the east and lights up their white under parts as they rise, so that

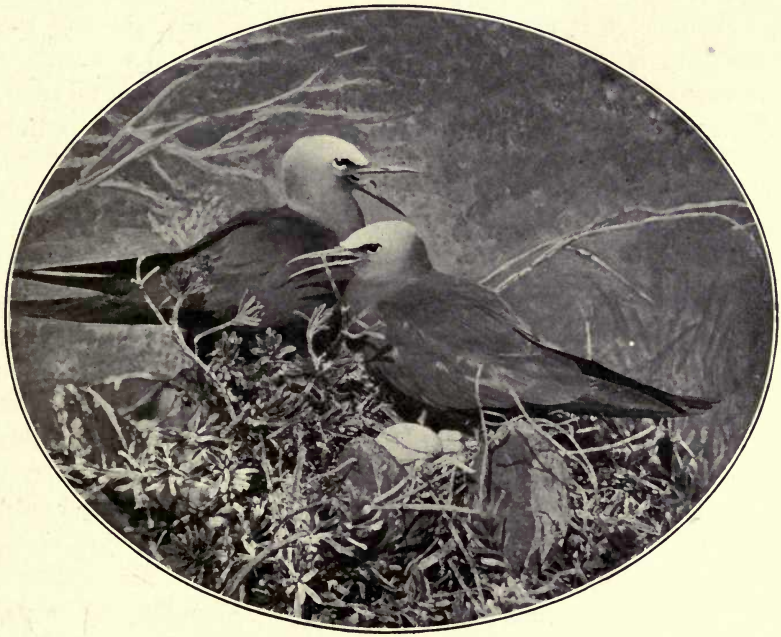
it is a good time for snap-shots of birds a-wing, giving about one five-hundredth of a second with the reflex camera. The negatives secured are likely to be full of birds, if we aim anywhere except down by our feet! Still the birds are rising from beneath the bushes. Some of them are in such a hurry that they get tangled up in the branches, and we take one or two of them in hand, stroking them and then letting the frightened creatures fly away.

Eggs are lying everywhere, in any sort of a situation. Some of the Sooties, in fact, even lay on the plank walk that runs eastward from the house. So, careful not to trample upon their treasures, we stroll off through openings into the midst of the bushy tract. Some of the Sooties have flown; others, surprised upon their nests, refuse to turn tail to the invader, and bristle up with a showing of courage, almost allowing themselves to be handled. We can easily take snap-shots of them, but I prefer to set up my small camera upon the tripod, using a single, long-focus lens of my double anastigmat, and, with a brief time exposure, secure a fully exposed, soft, detailed picture, even the veinings of the feathers showing.

Out on the open sand again, we sit down. In a moment or two the confiding, though nervous, little Sooties, whose eggs are all around us, begin to alight, first at some distance, but soon within three or four yards. When there is quite a mass of them, the focal-plane shutter drops with a bang, and up they go, to return in a moment, and quietly steal to their nests in plain sight or under the bushes.

Now we will take a look at the little pier. The Noddies and the Man-o'-War Birds love to roost on it in the morning sun, though, somehow, the Sooties seem not to relish the company, or else their tastes are different. There they sit, as usual, perhaps twenty Noddies and half a dozen of the great

hooked-billed, long-winged pirates. Though at times unfriendly, the similarity of their dark plumages — perhaps — gives them now a sense of having some things, after all, in common, and they sit together as though ever the best of friends. The big fellows are not over-tame, so from the



NODDIES. "THE MALE STANDS BESIDE HIS MATE AS SHE BROODS"

nearest bushes, fifteen yards away, we use the telephoto lens. Then, upon my knees, head covered with the focus-cloth, looking intently into the hood of the reflex camera and watching the image of the birds on the ground glass, keeping good focus upon them as I advance, I creep nearer and nearer. The movement is so gradual, and the object so nondescript, that they are not alarmed. At length I am very near, and

make an exposure. Probably the noisy Sooties have already deafened them, for they do not seem to hear. Changing plates, I again advance. When I am almost at the wharf, they start to fly, and just as part of them have launched out, I snap once more, and get an interesting picture — as it turns out. This can be done again and again.

From here it is but a few steps to the main resort of the breeding Noddies. Most of their nests are upon the bushes just above the beach, or on bunches of cactus. Some of them fly as we approach, but soon settle down again. Their quietness is in strange contrast with the conduct and disposition of the Sooties. In photography, now, we may do practically anything we wish. Here is a nest where the male stands beside his mate as she broods. Possibly he may fly up, as we focus about a yard away; but ere we are ready, he will be back, and the picture of the pretty pair is easily secured. Meanwhile, as we work, our coat brushes against another nest, with a sitting hen Noddy upon it. She does not fly, but bristles out her feathers, croaking her feeble remonstrance. I stroke her on the back, and as soon as she feels the touch, she is gone. But when the egg is nearly hatched, we could lift her off, and, replacing her, she would continue brooding without alarm, I am told, so overpowering is Noddy's maternal passion. From this trait the great naturalist, Linnæus, who named the species, called the Noddy *Anous stolidus*. Stupid fool, it means; but I resent having any such scurrilous epithet applied to my pet. Will not the authorities kindly change the name?

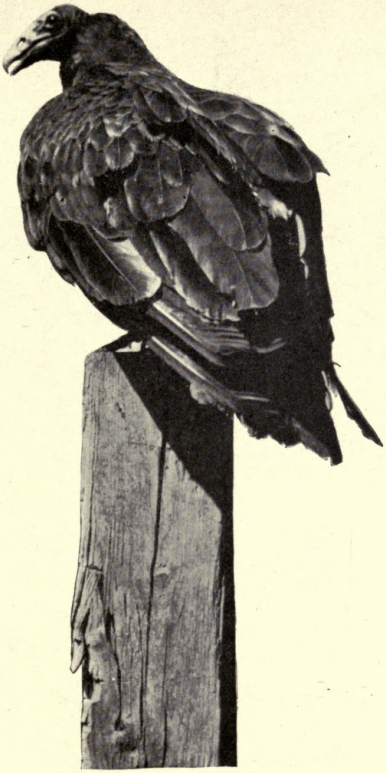
So we might go on, as long as we wish, photographing Noddies — on the egg, beside the egg, tail cocked prettily aloft, mates caressing, looking down or up, the croaking, scolding posture, when Noddy strikes the attitude of the cawing crow (pretty little sea-crow), beside many other poses.

Really, it is hard to tell when to stop this photography! I am sure if I were to remain on Bird Key the livelong season, I should find something new to photograph every day, as long as the plates lasted. During my four days' stay I managed to keep my enthusiasm under some sort of control, and only exposed 156 plates!

Thus the days all too quickly passed, and when, before sunrise on Saturday morning, my friend the guide rowed me across to the fort to take the steamer and start on my long trip back to Connecticut, I felt that I was leaving a land of sunshine and exhilarating delights when, from the deck of the steamer, I saw fade in the distance the sands and bushes of lonely Bird Key.

SOOTY TERN. "WITH RATHER LONG, POINTED WINGS"

Part II



Other Wanderings South

From cold Norse caves or buccaneer southern seas
Oft come repenting tempests here to die.

LANIER.

BLACK VULTURES. "THEY SIT IN ROWS UPON THE ADJOINING HOUSES"

CHAPTER VI

SCAVENGERS OF THE SOUTH

Circles and sails aloft, on pinions majestic, the vulture.

LONGFELLOW.

WARM was the Florida sunshine and the soft cypress-scented breeze that clear April morning over the great Jane Green Swamp. On the lonely prairie beyond its confines herds of half-wild cattle grazed serenely. Out on the islets of the immense adjoining marsh that formed the head waters of the St. John's River the Ward's Herons and several others of this tribe had built their rude stick nests in the willows, or were laying their bluish-green eggs; while the Snake-birds, with their peculiar long necks and rudder tails, perched lazily upon their roosts over the water, ready for a plunge after the first venturesome fish that might rise

from the slimy depths under the "bonnets" or the floating fields of water-lettuce. In the swamp itself, that stretched away for forty miles, — a wonderful area of immense cypresses, live-oaks, and other Southern trees, with stately palmettos to guard its portals, — the Barred Owls were quiet in the shade of foliage and streaming Spanish moss, but the tall, stately Wood Ibises — great birds, almost "man grown" in stature — were nesting out on the spreading boughs of the cypresses, a hundred, yes, a hundred and twenty-five feet from the ground, where no enemy, without wings, could harm them.

On the edge of this great, lonely, shadowy swamp was an open slough or marsh, now nearly dried up by the spring sunshine. To the last and deepest pool had resorted many a small fish, in vain search for moisture for its parching gills. But even that had become quite dry; the fish lay dead in heaps, and a flock of about a dozen Turkey Buzzards, gathering there, had gorged themselves to repletion. Sluggishly they stood on the moist ground, with drooping heads and wings, revelling in their satiety and in the warm sunshine. Little note did they take of passing time, until suddenly four men came right upon them and forced them into unwilling flight.

It was our party, who had spent most of the day exploring the great cypress swamp with two special plans in mind. One was to see a nesting colony of the Wood Ibises in the immense cypresses, which the guide had visited in previous seasons; the other was to find a reputed buzzard rookery. Two "crackers" had called at our camp on the way to the coast to sell some enormous rattlesnake skins, and, in describing the region, had told us of a place in the great swamp, six or eight miles from here, which was a remarkable resort for buzzards. Occasionally, in hunting, they had passed it, and had seen large numbers of the buzzards sunning them-

TURKEY BUZZARD. SUNNING ITSELF

selves in the trees and on the ground. The whole place was filthy, and some of the trees had died. It is well known that buzzards habitually resort to certain localities as roosting-places. I myself had seen one, on a small scale, in the timber along the Sheyenne River, in North Dakota, and one of my guides knew of another in the western part of that state. This was among the rocks on the side of a steep, barren hill, and the Turkey Buzzards not only resorted there to roost, but some of them reared their young under the rocks.

I should very much have liked to stumble upon this roost in Jane Green Swamp. In the attempt to reach it we had poled and dragged a boat four weary miles over the treacherous morass, stepping out now and then into aquatic vegetation which abounded in deadly moccasins, one of which would now and then slip out fairly from under our feet. Then we had to walk six miles across the prairie, passing occasional

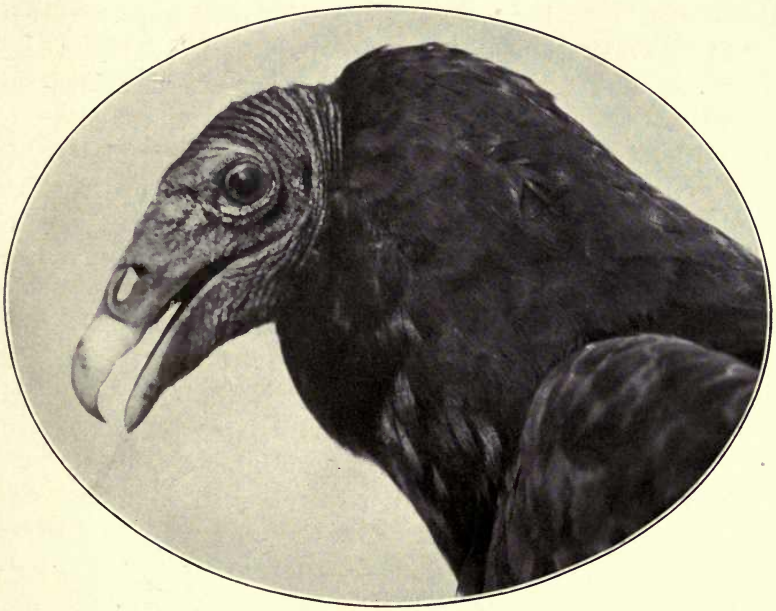
bands of cattle. Having done this, we were on the edge of the swampy forest, with its giant cypresses, which, rising boldly from the prairie level, gave the effect of a long range of hills, stretching away, as we were told, some forty miles. The men had described the location of the roost, but we were unable to reach it. It was several miles farther, and we had all we could do in a day to investigate the Wood and White Ibises, Barred Owls, Florida Black Ducks, and other interesting birds.

When we emerged, at length, and started up the band of gluttonous buzzards, we watched to see whether they would not fly toward their rookery. All they did was to extend their great ragged pinions, and, after the first few flaps, let the ascending current of heated air do the rest. Lazily they wheeled high overhead on motionless wings, waiting for us to withdraw. No doubt they finally went back, but only in their own good time, when the shadows of the cypresses had grown long and sombre.

It was quite near this spot that we came upon the nest of a Wild Turkey, the only one I had ever seen. Under a low scrub palmetto, on the edge of the prairie near the forest, the bird had scratched out a slight hollow, lined it with grass, and deposited a dozen large speckled eggs. These had hatched, and the shells, neatly cracked in halves, some of the pieces telescoped, were lying there. Eggs are just the sort of special treat that buzzards enjoy. Very likely Turkey Buzzard and turkey had matched wits and patience, but the owner of the nest had won, so the scavengers were forced to attend more strictly to business and search out death among the cattle herds or the bands of razor-backed hogs — hateful, grizzled monsters that were ever ready for intrusion.

If the choice must be between buzzards and hogs as scavengers, give me the buzzard. He has at least a tithe of

respect for one's feelings, which the hog has not. From our camp here by the morass, in a fine grove of cabbage palms, the hogs nearly routed us. We had hard work to keep provisions for ourselves, and as for the horse — poor beast!



TURKEY BUZZARD'S PORTRAIT. "NOT ALTOGETHER AS PRETTY AS A PICTURE"

— one night I awoke and discovered a hog right beside me, with its nose in the only bag of grain. My foot shot out, and a sudden tropical storm instantly almost wrecked the tent!

One evening, weary with our poling about in the morass, we returned to camp. A member of the party, an enthusiastic collector, had that morning stuffed a fine Florida Barred Owl, well dosed with arsenic, which he had laid away — tenderly as though it were a new baby — in a box. I shall never forget the look on his face as he came striding out of the tent,

exclaiming, "Where's my Barred Owl!" All we could find was a solitary feather. The hogs had eaten it, arsenic and all, besides a Florida Duck and more or less of our provisions. My friend consoled himself that there would be at least one sick hog that day. Little satisfaction did he get; if the beast had been sick, it had evidently soon recovered, for the usual precious band of nine paid us a visit early next morning, hungry as ever, and eager for another breakfast on luscious owl-skin with cotton dressing and arsenical sugar.

The men who told us of the buzzard-roost wrongly supposed that the birds nested in the trees, like the ibises. The two handsomely blotched eggs of each pair are laid on the ground, in such places as hollow logs or stumps, caves or thickets. I was once shown an old circular stone slave-prison, in South Carolina, where a Turkey Buzzard always nested. Trees and shrubbery had grown around and concealed it, and the roof had fallen in. Climbing in through a window opening and scrambling down, I found plenty of buzzard feathers and dirt in the thicket of weeds, but by this time — May — the young scavengers had taken to wing and departed. In another place, in North Carolina, another Turkey Buzzard always was accustomed to nest in a certain old hollow stump, near a farmhouse. The owner of the land allowed no one to disturb the brooding mother, and enjoyed seeing her bristle up and strike, and hearing her hiss. The young are interesting, and rather pretty, with their woolly white suits. Neither old nor young can utter any sound save a low guttural murmur, a little sort of gasp, and a prolonged hiss. This muteness of the stalwart birds may not be inappropriate, for it is their lot to live in the presence of death, where it is fitting to keep silence, or to speak in whispers, with bated breath.

When I first journeyed South, I confess that I felt consid-

erable prejudice against the buzzards, of whose ways, unclean from our human standpoint, I had read. Yet no true nature-lover can afford to despise any part of the natural economy, and I found that there is much to be said for the buzzards.

TURKEY BUZZARD. "A FINE SUBJECT TO PHOTOGRAPH"

Probably most birds have habits which would not bear close inspection by the squeamishly inclined. We can well afford to gloss over or euphemize some things in nature which strike us as disagreeable, realizing that the natural economy is more reasonable and normal than our artificial prejudices. The person who shudders at every wonderful insect and loathes the toad, lizard, and harmless snake, and screams at a bright-eyed mouse, is profoundly to be pitied. The natural world to such will be a sealed book and an array of horrors.

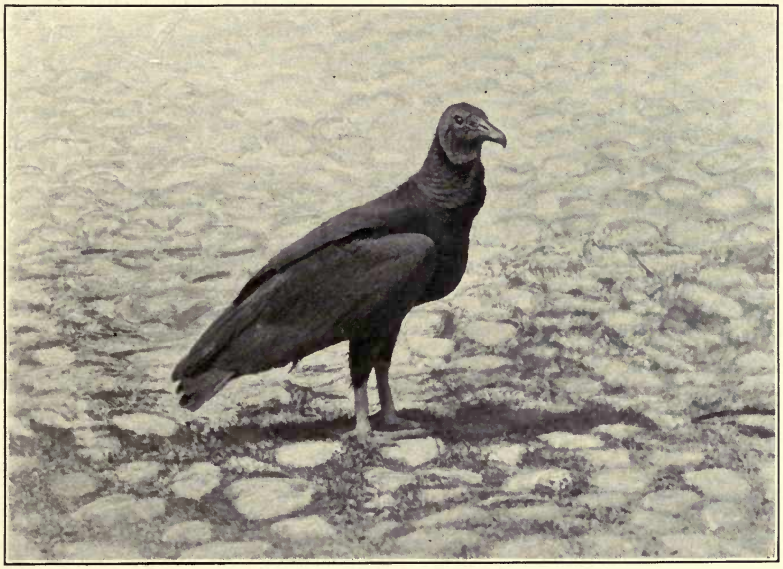
Some one asked me if I love all birds. Certainly I do, from the grebe to the thrush, hissing young woodpeckers, thieving crows, naked, skinny young cormorants — yes, and buzzards. There is plenty that is admirable and interesting in them all.

Every one who visits the South is impressed with the graceful flight of the buzzards. There are no finer flyers among birds. Mounted aloft, they soar and float so easily and airily that it is restful to watch them. There is no symptom of our restless spirit of rush. Their movements blend with the surroundings, a sleepy atmosphere, an ardent sun. Probably they would not soar by the hour if much effort were involved. But after they are started, there is nothing to do but to keep the great wings extended, and by instinctive balancing direct the way, letting the air-currents do the rest. A Southern landscape without buzzards would be quite incomplete.

The observer should learn to distinguish between the two species — the Turkey Buzzard or Vulture, and the Black Buzzard or Vulture, the latter also being called Carrion Crow. The former is the more common and more widely distributed. The other is more a maritime species, though it also frequents the neighborhood of large rivers, notably the Mississippi. The Turkey Buzzard is also the more graceful flyer, and, though dark of plumage, is of a browner cast than the others. The Black Buzzard is a heavier, more stocky bird, and has to flap more and harder to keep itself afloat.

Both of these birds, though tame enough about human habitation, are somewhat shy off in the wilds. So, on my first real acquaintance with them, in Florida, I was rather hard put to it to secure good photographs. I would meet them along the East Coast Railway, perched on telegraph poles, or on stubs by the Indian River, and generally they would fly before I wanted them to. Once I managed to rig my

telephoto lens and focus on one at a moderate distance on a telegraph pole. Unfortunately the bird decided to fly just as I opened the lens for a timed exposure, the result of which was a streak of buzzard clear across the plate. The only possible chance I had, that first season, of photographing a Black

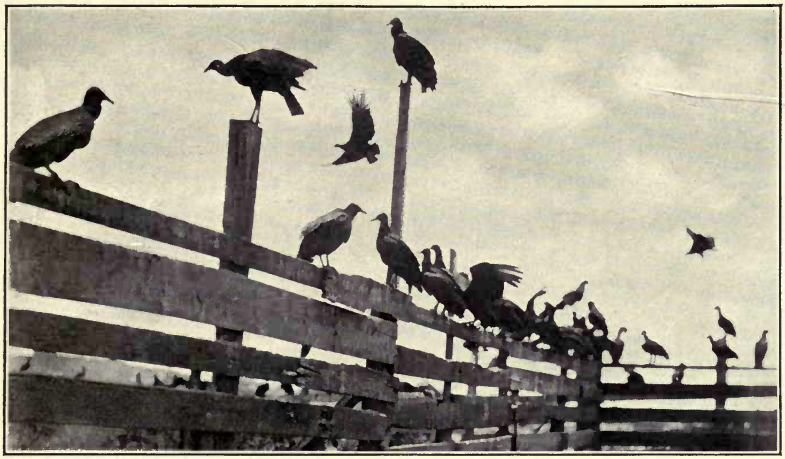


BLACK BUZZARD ON STREET IN CHARLESTON

Buzzard was when I saw one sitting quietly on a palmetto stub, gorged after a banquet on the remains of a large turtle which some negroes had killed and cut up, giving a number of Turkey Buzzards and a black fellow or two a fine time. No one need say that the poor buzzard prefers carrion, if he can find as nice fresh meat as this. Well, I was sneaking up to the buzzard, and was almost sure of a snap-shot, when a companion fired his gun at a duck which passed over his head, and away went my subject.

The Turkey Buzzard is quite widely distributed. I have often seen it away up in North Dakota, and now and then it appears in Connecticut. One warm August day, in the latter state, I drove eight miles to see a singular, unknown bird which a farmer wrote me he had caught. It proved to be a Turkey Buzzard, slightly wounded, which had now fully recovered. Taking it home with me in a box, I kept it in my stable. It fed voraciously on livers and sounds, drinking plenty of water, and made a fine subject to photograph. But I could never teach it that it was not necessary for it to offer me its dinner whenever I had occasion to handle it. One very singular habit it had was to fill its lungs with air, and then slowly expel it, keeping up a steady hiss, like escaping steam, for about ten seconds. Another was to stamp its foot angrily upon the floor several times in rapid succession.

Passing through Southern cities, I had seen from the car windows flocks of buzzards frequenting dumping-grounds and similar places in the environs. And when I had occasion to stay for several days in one of them — Charleston it was — I had the chance of my life to study buzzards. Fortunately, too, it was mainly the Black Buzzard, the kind less familiar to me. Right in the heart of the city, the great black fellows visit the market. They sit in rows upon the adjoining houses, or upon the market buildings themselves. Presently one of the market-men, after serving a customer, throws the scraps he has cut off into the paved street. Instantly there is the greatest imaginable flapping of wings and such a scurrying. Great birds by the score tumble pell-mell into the street, and laying hold upon the choice morsels, a number at a time, tug and haul, until the strongest gets the prize. Meanwhile we stand within a few feet and laugh. Then they linger around and wait to see if more will not be forthcoming, or



BLACK VULTURES. "THE FENCES OF THE SLAUGHTER-PENS WERE FAIRLY BLACK WITH THEM"

stalk about with dignified air as though they owned everything and were indeed Charleston's leading citizens.

But the great place to see the sport is at the city dump and slaughter-pens, out in the suburbs. One afternoon, carrying a big reflex camera, and with a young lady cousin, I took a trolley, and told the conductor to let us off at the city dump. The look of incredulity and scorn in the man's face was something that nearly convulsed me with laughter. He merely gave me a surly grunt, and when we reached what was evidently the place, made no motion to stop. He finally had to, and we got out with great deliberation and dignity, the passengers all craning their necks to take in this new wonder. Perhaps they thought I was a Federal inspector investigating the sanitation of their city — or an escaped lunatic.

Modern methods of destroying garbage are not considered necessary in these favored quarters of the globe. The buz-

NEGROES AND BLACK BUZZARDS ON THE CITY DUMPING-GROUND, CHARLESTON

zards have secured the contract for this work, and they never neglect their duties. At this particular time, in May, there must have been upwards of a thousand buzzards in sight, all of them the Black Vulture. The fences of the slaughter-pens were fairly black with them, awaiting patiently the good pleasure of the butchers, and they had little objection to my walking up close and taking their pictures. When I finally scared them off, they settled down on a marshy place near by, joining a regiment of their fellows already there. Thither I followed, and took some photographs of this remarkable conclave.

Out on the open lots where the city carts were dumping the garbage, numbers of negro women and children were poking over these leavings, in hope of finding some prize, and with them were the buzzards, getting their share. Neither class paid attention to the other, and they were closely intermingled, on evident terms of good fellowship. By courtesy I was allowed

to join the company, and I was interested enough in all I saw.

I should have liked to visit the night-roost of the buzzards, which in the days of Audubon was in some woods two miles from the city, across the Ashley River, and may yet be in use. However, the limited time at my disposal forbade. According to Audubon's account, he and the Rev. John Bachman did not find it very clean. So be it. If we should refine our scavengers overmuch, they would probably forage the poultry yards and cease to be the useful birds that they are — albeit they do commit some depredations upon wild birds' young and eggs. But I have no desire to overturn the economy of nature, and so, though the buzzard's portraits do not make him out altogether as pretty as a picture and fair as a lily, I confess to a feeling of great kindness to these our humble scavengers.

TURKEY BUZZARD. "ON PINIONS MAJESTIC THE VULTURE"

FLOCK OF LAUGHING GULLS BY THE QUARANTINE STATION

CHAPTER VII

VIRGINIA BIRD HOMES OF BEACH AND MARSH

. . . with a step I stand
On the firm-packed sand,
Free
By a world of marsh that borders a world of sea.

LANIER.

THE fame of the region had travelled afar. Its distances were impressive, its sea-beaches magnificent, its marshes the very symbol of the infinite. But these were not the reasons for its renown. It was a land of birds, — birds of sea and shore, of kinds not easy to find, — rich both as to numbers and variety. Winnowing gulls and darting terns of several kinds laid their eggs on sand and marsh, and their excitable colonies added a spectacular interest to the landscape. The singular and remarkable Black Skimmer was there in all its glory. Shore-birds, some of them nesting,

could be seen at their best. The salt marshes teemed with Clapper Rails, or Marsh Hens; Ospreys and Eagles built their huge nests in the strips of woods; Great Blue Herons, long of neck and limb, plied their fishing-trade and nested in colonies somewhere in the vicinity. The fact, too, that the region was one of sea islands added to its interest, for there is a sort of romantic fascination about an island. Bird-students from time to time had visited it, and their accounts were always glowing.

To be definite, this favored locality comprises the islands which lie off the northern peninsula of Virginia. Of these, Cobb's Island has been the most celebrated, but there are several others that are of equal interest. These islands are from two to four miles from the mainland, long narrow strips, parallel with the shore, and almost joined together, extending for many miles. The backbone of each island is a ridge of sandy loam, usually covered with woods of tall pine. On the ocean side are fine, broad sand-beaches, while in the rear is a vast salt marsh, cut up by creeks innumerable. The whole region is a veritable Rehoboth, where the traveller will find no lack of room.

When the time came that my zeal would brook no further delay in seeing these things for myself, I was unable to find another of like mind and with the necessary time at his disposal. Yet, desirable and agreeable as is a congenial companion on such a trip, its pleasure is not spoiled by one's being alone. Anticipation keeps one in a pleasant day-dream, and realization is sufficiently absorbing to make one forget all else.

On this occasion there was no time for lonely reflection. One evening late in June, bestowing myself in a sleeper berth, ere the late train left Jersey City, I dreamed delightfully of the birds, and awoke early in the morning not long before

I reached my destination at Cape Charles, Virginia. In a few moments I was talking over the telephone with Captain Hitchens of the Smith's Island life-saving station, my host, who was to meet me and sail me across. Such modernizing of the conditions of the supposedly lonely and retired sea islands hardly seemed in keeping with the purpose of my journey. But after a darky boy had driven me twelve miles in a livery team, and the genial keeper had sailed me four miles across the bay to his island home, my hopefulness returned. Aside from the abodes of the keepers of the lighthouse and life-saving station, the government buildings, there was not another human habitation. The tall towers of the new lighthouse on the bay side, 192 feet high, and of the old abandoned one nearly undermined by the ocean, almost as tall, showed up over the sea, flats, and marsh for many a mile. What a difference the telephone makes in the lives of these otherwise isolated families I could vividly realize, as I heard the keeper with whom I stayed "call up" in the morning the various other island stations along the coast and chat with their keepers about the weather and the occurrences of the day or night. How different from the so-called good old times!

The first look from the station southward down the broad beach told eloquently of the hopeless resistance of these sea islands to the onslaughts of the ocean. Within the memory of man their shores were a mile farther out to sea. The spot occupied by the station was then in the midst of a pine forest. Now the buildings are all but undermined by the waves which storms drive up around them. From the very beach rise an array of decaying stubs and stumps, a warning to the pines behind them of what will soon be their fate.

Somewhere I had received the impression that the conditions of bird-life around my headquarters would be comparable to those of Noah's ark. Really I had almost expected

to gaze upon fluttering multitudes out of my bedroom window. But I was soon undeceived, and I found myself next morning trudging up the beach northward, weighted down with a backload of impedimenta, under the ardor of the late June sunshine. For a mile the way was past the pine-tract, which contained many great Osprey's nests, conspicuous as hay-mows in the tree-tops. Then came the sandy beach, unrelieved by any background save that of the low, interminable salt marsh. A tramp of miles upon the sand may be wearisome and monotonous, or not, according to circumstances. When breezes blow free and the waves are flowing, when shore-birds pipe their clear, mellow calls, when sea-birds flit gracefully by and plunge into the brine, one forgets his burdens and feels as free as they.

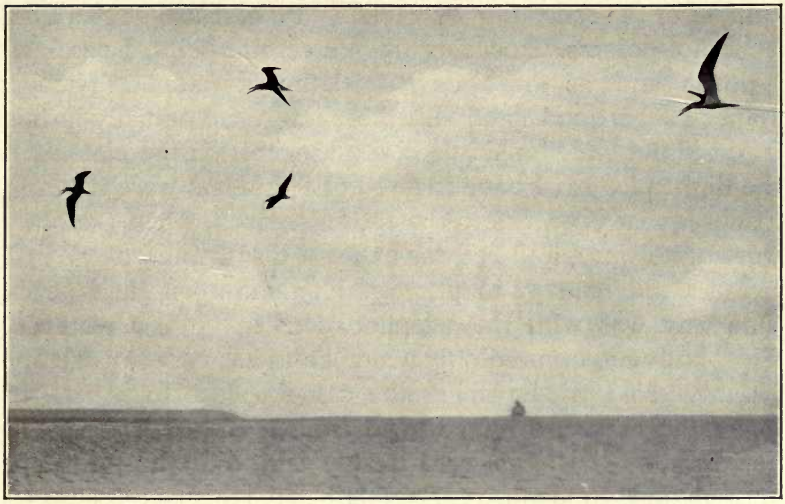
Expecting such conditions, I plodded along, and was rewarded. After about three miles I began to hear the sounds

NEST AND EGGS OF THE BLACK SKIMMER

of bird-flutes, and pairs of demure little Wilson's Plovers ran pattering before me along the shingle. Some louder, more incisive cries came from a couple of Oyster-catchers, large and wary shore-birds that probably had young in the vicinity. A mile or two farther along I began to approach a flock of good-sized birds whose sooty black plumage showed up with startling contrast against the dazzling glare of the sand upon which they were resting. Presently they took to wing and came dashing toward me like a pack of hounds in full cry. Darting past, they revealed their white under parts and great carmine bills, the lower mandible projecting beyond the upper one. This most singular bird is the Black Skimmer. Were there nothing else picturesque in the landscape, these would suffice and would furnish inducement enough for the trip down into old Virginia.

About a dozen pairs of them were nesting at this particular spot. By threes and fours their rather large white eggs, handsomely marked with black, were readily seen lying in hollows in the dry sand above high-water mark. They make no nest whatever, save to scratch out a little round depression, which is similar to the numerous wallows where the birds have been squatting to bask in the sun. A few hundred yards beyond was another group of perhaps twenty nests, and so these groups recurred, as I continued my way along the seemingly endless beach.

It was a lively and beautiful scene. Parties of Skimmers were flying about in all directions, some across the sand, other bands close over the surface of the ocean just outside the white line of the lazily breaking surf. One moment they would wheel and look like snowy terns, then immediately they would become as black as crows, according as they presented their lower or upper parts. But their cries! Sometimes one would suddenly dash by me and utter, almost in



"PARTIES OF SKIMMERS WERE FLYING ABOUT".

my ear, a veritable shriek, loud enough to startle one greatly, if taken unawares. More often the cry was a reiteration of sounds which reminded me of the violent sobbing of a child, made by drawing in the breath. They were anxious about their eggs; indeed it would sound as though they were fairly heart-broken. If they really suffered as much as their curious remonstrance seemed to imply, I should have felt positively guilty in subjecting them to such outrageous indignity by prying into their domestic privacy and happiness. I called them "the sobbing birds," and they darted about and sobbed their hearts away as long as I stayed near their nests. As they "sobbed," I could see their bills, like pairs of great shears, open and shut, as though, in flying by, they would snip off my ears. Flying low over the water, they seem to shear it as they quickly, in passing, pick up fish or other marine creatures from the surface.

To photograph them in flight successfully requires a

camera of the reflecting, or "reflex," type. Such at this time I did not possess. Focusing upon a certain point, I snapped a dozen times as the birds passed the exact spot. Though I am called a good shot with the shot-gun, I actually in this case did not "hit" a single bird and get it on the plate. All the flight pictures I have secured of Skimmers were taken in a subsequent year, before the nesting-season, when the birds were quite wary, and had me at great disadvantage.

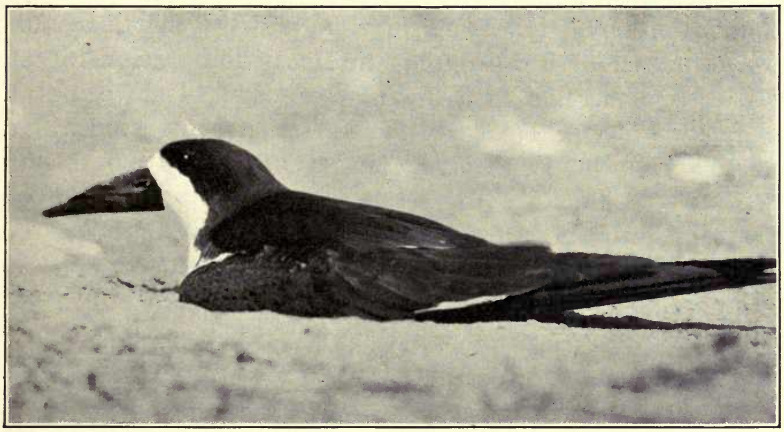
But I did manage to photograph them upon their nests. One way was with the telephoto lens at quite a distance. This, however, secured only a small and not very satisfactory picture. So I tried placing the camera close to a nest, to make the exposure by a thread from a distance. This did not work, as the eggs were freshly laid, and the birds not very anxious to incubate. So I left small heaps of seaweed near certain of the nests, and had no trouble next day in securing all the pictures I required. After the camera was properly set, and covered with the weed, and I had lain down upon the sand at some distance, the bird would soon return and alight about a rod from the nest. After a few moments' hesitation she would patter over to the eggs and settle down upon them, always facing the wind. All I had to do then was to pull the thread, and then change plates and try again, if I wished another picture.

Along these reaches of sand many terns were also nesting, laying their three eggs — smaller than those of the Skimmer, and with a darker drab ground-color — in hollows of the sand or among shells and pebbles, usually with a little lining of straw, or at least of chips of shell. Wherever I went bands of terns were hovering overhead, with piercing cries. Most of them were the Common Tern, but quite a few were of the Southern species known as the Marsh or Gull-billed Tern. Both are very similar in color, — white, with pearl-gray

NEST AND EGGS OF THE CLAPPER RAIL

backs, and black cap and wing-tips, — except that the former species has an orange bill, the latter a black one. The nests were scattered irregularly about and usually contained three eggs.

The great salt marsh back of the narrow strip of sand was meanwhile offering its allurements. Willets were flying about with loud outcries, distressed lest I should find their young.



BLACK SKIMMER INCUBATING EGGS

A flock of Laughing Gulls — so called from their laughter-like cacklings — were preening their feathers by a pool on the marsh's edge. The occasional "cluck, cluck" of some Marsh Hen, or Clapper Rail, invisible in the grass, bespoke a new wonder of which I desired to know more. Although there are doubtless tens of thousands of these peculiar birds on all these great marshes, I learned to my chagrin that it was by no means easy to find a nest. Two hours' hard tramping over the sticky and treacherous expanse failed to reward me with an occupied nest. Two were discovered from which the young had gone. They were neat, saucer-shaped

platforms of dry stems, built in tussocks just above the reach of the tides which flow up all over the marsh, and were canopied over by the grass in a very pretty manner. At one time I caught sight of a little black young rail, which led me a sorry chase over a soft mud-flat, greatly to the detriment of my personal appearance. I had almost caught it, I thought, when suddenly, as though by magic, it faded from my sight amid a few sparse blades of marsh grass. Oh! but I was thirsty that day! It was blazing hot, and the marsh seemed like a furnace. After drinking the last of the precious water, I found some relief in a dip in the ocean. Then came an eight-mile tramp. Next day the keeper provided me with a horse and tipcart for the same jaunt. This time I took plenty of water, but, in an evil hour, I made the horse trot upon the apparently smooth sand-beach. Everything on board the springless cart began to leap into the air. A hole was chipped in the bottle, and nearly all the water had leaked out ere I knew it. Only about half a pint was saved by holding the wreck of the bottle in my hand as I drove, and I had another thirsty day of it.

The numerous Laughing Gulls were not nesting in these particular marshes, and to locate them I scoured the bays and marshes far and near in a sail-boat with the keeper. Away out near the entrance of Chesapeake Bay lie a group of small islands, upon one of which is a U. S. quarantine station, about as isolated a location as one could well find. Here, upon the wide flats, were Laughing Gulls by the hundreds, consorting with Black Skimmers and Common Terns. But what amazed me most, as I landed upon a low sand-bar of an island, was to find scores and scores of the Black Tern, in full breeding plumage, hovering overhead, darting down at us, and acting exactly as they do out in the sloughs of North Dakota when one approaches their nests. The strange

LAUGHING GULLS HOVERING OVER THEIR NESTS

thing is that they are not known to breed in eastern North America, though they occur as migrants. Unfortunately there had been a high tide which had washed the key clean of all nests and eggs, certainly of Black Skimmers and Common Terns, and probably of the Black Terns also. I noticed one little hollow, lined with weed, which looked like one of their nests.

On another islet, — this one marshy, — a dozen miles to the northward of this, I finally found my first nest of the Marsh Hen. First of all, in landing there, I discovered several nests of the Forster's Tern, mere hollows in piles of dry eel-grass drifted up on the marsh grass. One of these, which had the usual three eggs, I photographed, and with it the female bird in the act of alighting. This was done by setting the camera upon the tripod and pulling the thread from hiding in some

long grass. A few days later I returned to show the nest to a friend. As we stood by it, I caught sight of a gleam of white, and there was a nest with eleven eggs of the Marsh Hen, skilfully concealed under the canopied grass. I had placed my tripod directly over it, and then gone away without detecting its presence.

Stepping back from this nest a few feet, I suddenly flushed the mother bird, which I had almost trodden upon. So confident are they in their protective coloration and surroundings that they are almost fearless of dull-eyed man. The day before this I had waded out in a marsh at high tide to a little hummock and, standing upon it, clapped my hands to start up a Willet which had alighted out beyond. Upon this up jumped a Marsh Hen almost from between my legs. It, too, had taken refuge from the tide and did not intend to yield its ground for any ordinary alarm. Sometimes I saw them, when suddenly flushed, fly straight out into the bay and alight upon the water, where they would swim like ducks.

Despite all accounts, I did not find the Laughing Gulls' nesting-grounds till I extended my wanderings to the vicinity of Cobb's Island. Meanwhile I had found and photographed a rookery of Great Blue Herons on the mainland. As we approached a little marsh island in our sail-boat, bands of hovering, cackling gulls gave assurance of certain success. The very first thing one of the men saw, on jumping from the boat, was a Marsh Hen's nest with eight eggs. The overarching of the grass revealed it. Very close by was another with eight eggs, and still another with eleven. It was now July 2, and these were second layings, for the Marsh Hens here begin their family cares in April or early May. Then we discovered, here and there on the marsh, the nests of the Laughing Gulls, hollows in piles of drift-weed, in each of which were three drab-colored mottled eggs.

Toward evening we landed upon Cobb's Island at the life-saving station which stands on piles at the edge of the immense salt marsh. Here we were pleasantly entertained by "Captain Jack" and his family. A long bridge on piles leads across the marsh to the outer beach. These structures and a very few others loom above the water and the tops of the

YOUNG COMMON TERNS, READY TO ESCAPE

submerged grass at high tide, and are all that are left of a thriving village with schools and churches. The sea has claimed its own, and, never satiated, clamors for more. It is not man who will say it nay.

Next day we traversed the long bridge and found ourselves upon the ocean front, which was backed by a wonderful ridge extending perhaps a mile and composed entirely of shells,

particularly of oysters, scallops, and sea-clams. Some of the terns by this time had young. The downy little fellows do not remain long in the home-nest, but wander about freely over the warm sand. Nature's "protective coloration" wonderfully blends them with their surroundings. When an enemy approaches, all they have to do is to squat and keep perfectly still, and the chances are that they will not be noticed.

At one place a Marsh Tern was making a great ado over my presence, screaming and swooping down so vigorously as almost to strike me on the head. Slowly walking about, I kept my eyes fastened on the glaring sand. After some moments, I suddenly spied the cause of the commotion, a young tern squatting at the foot of a weed. During the quarter of an hour I spent photographing it, not a yard away, the little creature did not stir a hair's breadth. As long as I did not touch it, it evidently thought itself unobserved. But when my work was done, I gave the touch that dissolved the magic spell, and it went racing away.

In this vicinity the Laughing Gulls were also nesting. Some had nests out on the marsh, others in the clumps of coarse grass just back from the beach. I chose a spot where there were only a few scattered pairs, to make as little commotion as possible and not to keep many birds long off their nests, where I began the ordeal of trying to photograph them at short range. Selecting a nest with the usual three eggs, conveniently located, I set the camera on the ground near it in a clump of grass, the latter arched over it in what I thought to be a masterly manner. As I lay hidden, peering over a sand-dune, thread in hand, I was prepared to see the gull return almost at once to its nest. Soon the bird was hovering over it; she seemed about to alight, when away she went. Making a few circlings, she came back, but after

YOUNG MARSH TERN HIDING

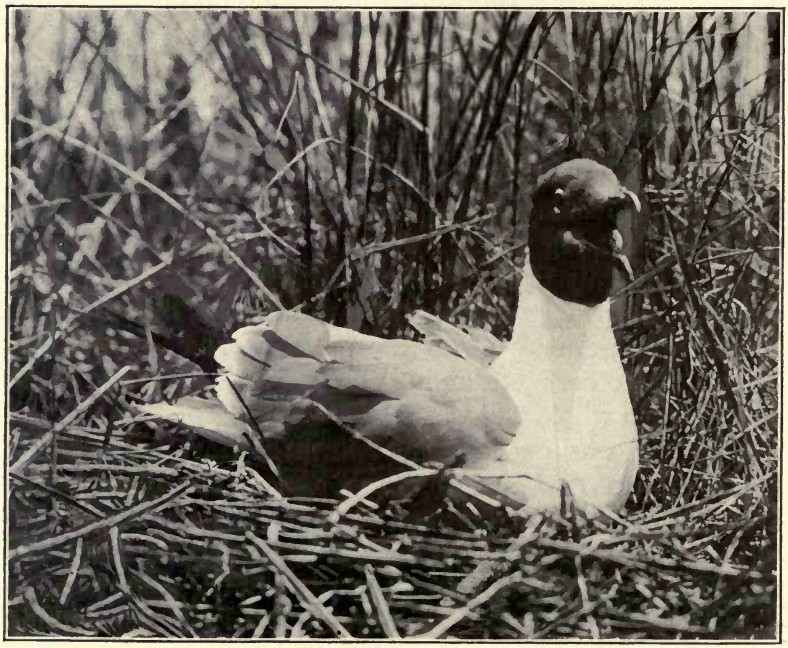
hovering provokingly, throwing up her wings as though certainly alighting, again was off. This was repeated till I was thoroughly tired. No further covering of the camera, changing its position, trimming it with leaves, or making an arched passage for it under the grass made any difference. Then I tried other nests, and it was the same old story. Thus was nearly a whole day wasted.

Next day was my last, the Fourth of July, and roasting hot, but I was early at the work again. The night before I had placed piles of seaweed near the nests, and was confident of success. But as the hours again slipped away, and no bird had given me a shot, I nearly lost hope, for I had to start back at one o'clock. Lying on my face in the burning sand, I began to fear being overcome by the heat, and

thought wistfully of my family up in Connecticut eating ice cream in the cool shade!

At quarter of one I seemed to be no nearer succeeding than I had been the morning before. All my resources were exhausted, and I was about ready to quit, when suddenly the hovering gull threw up her wings, and down she went. As I was two hundred yards away, I could not be sure that she was really on her eggs. So I waited five minutes, and then, seeing nothing more of her, I carefully and slowly drew the thread taut. Almost as soon as I stood up, the gull flew, evidently from the nest.

This made me feel that at any cost I must have just one more picture. So I changed the plate, set the shutter again,



LAUGHING GULL ON HER NEST

and returned to hiding. The gull worried me for another half hour, and then gave me my wish. With glad heart I removed the camera, left the birds in peace, and hurried back to the life-saving station, in time to be taken across the bay, and, elbowing through throngs of dark-faced celebrants in the town, to catch the evening train for home.

NEST AND EGGS OF MARSH TERN

THE AMERICAN EGRET IN FLIGHT

CHAPTER VIII

THE EGRET, IN NATURE AND IN FASHION

Vainly the fowler's eye
Might mark thy distant flight to do thee wrong.

BRYANT.

THE splendid snow-white heron known as the American Egret, one of the few kinds which bear the aigrette plumes of millinery and commerce, is among the waning species of America. In Audubon's time it was common all over the southeastern quarter of the country. Now there is but a pitiful remnant in the southern part of Florida, and a few other spots. Indeed it is generally supposed that there are practically none outside of Florida. So when I made a trip to another part of the South, to study and photograph birds, the Egret was not reckoned in as a likelihood, and but barely a possibility.

When the question was up for decision whether or not to go to a certain locality, the information that "white cranes" were constantly seen, and might be nesting somewhere about, decided it in the affirmative. So great a romantic, æsthetic, yes, and pathetic interest attaches to this beautiful, spectacular species that one might well travel far for the chance, however slim, of studying it from life, ere it is too late.

Thus it came about, at length, that after a long sail up a series of narrow, tortuous creeks, between walls of impassable mud and through immense salt marshes, we found ourselves anchored at the desired locality. Even before the anchor took the mud, late in the afternoon, I had seen the sun glance on the dazzling whiteness of several dozen of the Egrets as they flew to and from the marsh, immaculate amid the Southern mud which sticks like glue.

On shore, in the little village, the opinion prevailed that the "white cranes" nested in a strip of timber on the edge of the marsh, four miles away, and a negro boatman was engaged to row us over there bright and early. When the sun rose, we could see Egrets flying toward the timber, and several of the trees appeared white, as though crowded with the birds. Two of our company started off directly in the tender upon another jaunt, while another and myself waited for the darky. By nine o'clock we were feeling the race problem increasingly from the Southern standpoint. Finally we managed to hail a passing boat, and a negro boy pulled us up the creeks to the desired locality. There was not a sign of a heron there; the whiteness on the trees was the sunlight glancing on the dark, shiny leaves. But we accomplished much by meeting a man who was a hunter and had traversed the region thoroughly, who told us where the Egret rookery really was.

Following his directions, we had the boy row us back to

the yacht, and then to the settlement, where we hired a conveyance and drove ten miles through a region of sandy soil and pine forest to an old rice-plantation. There we hunted up the foreman, who knew the location of the rookery, in a great cypress swamp. We found him kind and willing, ready to take us to the place at once. First we tramped a mile along a woodland trail, when we came to an arm of muddy water under high, overarching trees, and a small, flat-bottomed skiff. Working two paddles, we glided on and soon emerged in a great area of cypress trees growing out of the water. Alligators and turtles splashed before us, and buzzards and ospreys wheeled overhead. From the cypress branches, with their delicate needle-foliage of pale green, hung the streaming gray moss. Pairs of Wood Ducks started up now and then from the water with resounding wing-beats. Bees hummed merrily about, and now and then were to be seen issuing from the hollow of some "bee-tree," which was, no doubt, full of delectable honey. It was a new experience, with an atmosphere of weirdness and grandeur, to be gliding silently over the water under the shadows of moss-bearded forest sentinels.

The beginning of the rookery was over a mile beyond us, and meanwhile we were interested in the huge nests of the Ospreys, built on the extreme tops of dead cypress stubs, thirty to sixty feet from the water. We paused by one comparatively low down, and secured some good snap-shots as the angry female alighted in the nest or was leaving it.

Though it was late in the afternoon, and a shower was imminent, we determined to see something of the rookery that night, and to explore it more thoroughly next day. So we paddled on, stopping all too often to push the boat off from some submerged snag on which we were stranded. At length the harsh squawking of herons became audible, and we

OSPREY AND NEST

glided into a minor rookery which was only halfway to the sanctum sanctorum of the saintly-appearing bird in white. Egrets and Great Blue Herons were here nesting in peaceful neighborliness. The great ragged platforms of sticks that formed the homes of each species were scattered indiscriminately upon adjoining trees over a couple of acres of space. They were high up on the outspreading boughs, and the

EGRETS AND LITTLE BLUE HERONS

great birds, broad of wing, flapped noisily therefrom at our approach and went squawking away. It was the twentieth of May, and both kinds had well-feathered young, which were visible as they stood up in the nests or climbed out on the neighboring branches. As we remained quiet to watch, the old birds began to pass silently overhead, and even to alight on the nests. The shower passed with a mere sprinkle and I had a brief season of sunshine for photography, but under great difficulties, in the thickness and shadow of the

YOUNG LITTLE BLUE HERONS

submerged forest. The trees were unclimbable, and the birds wary.

The region is one of malarial fever, and no white man dares remain there past sundown during the warm season. Even the overseer always drives back to town after the day's work. So soon we, too, had to quit, take the long jaunt to the yacht, and return early next morning. My friend thought he had had enough of it, so I left the party, put up with the overseer, and drove with him on his buckboard drawn by a little runt of a mule, employing him as guide to the rookery and other interesting localities.

It was nine o'clock before we could reach the swamp again. The guide and a negro paddled, while I was perched up in

YOUNG EGRETS IN NEST

the bow with my reflex camera, ready to do a better day's work than did Audubon, when he and the Rev. John Bachman visited an Egret rookery and killed forty-six of the birds. He quaintly comments, in his great book, that "many more of them might have been killed, but we became tired of shooting them." What wonder! But those were unenlightened times, and there was no "camera-hunting."

Passing the scenes of yesterday, where there were probably a hundred of the egrets and herons breeding, we came in time to the day of larger things. First we met, as we continued to navigate this cypress-sea, scattered nests, with eggs, of the Yellow-crowned Night Heron. Then we began to meet individuals of the familiar Black-crowned Night Heron of the

North, also breeding, and soon emerged into a more open area where the trees grew more sparsely and not so tall. At every rod of progress dozens and scores of Egrets and of the smaller, dark-colored Little Blue Herons, with numbers of the bluish but white-breasted Louisiana Herons, kept springing into the air. For nearly half a mile we kept on, and it was the same story. Then, as the abundance began to lessen, we returned to the heart of the rookery to spend the day.

The two small herons nested quite low down, the former even in clumps of bushes, so that it was comparatively easy to secure photographs of the eggs and young in these nests. It was not so with the Egrets, which nested high in the cypresses. Though I had no climbing-irons, I finally ascended one slender tree to an Egret's nest about forty feet up. There were three bluish eggs in it, but it was situated in the topmost fork, with only a slender, rotten stub above, and could not be photographed. One other to which I managed to climb had three rather small young. Though similarly situated, the stub above was a trifle stouter, and I managed, with some trepidation, to screw up my small camera, replace the refractory young many a time in the nest, hang on with my eyelids in the gusts of wind, and make some successful exposures.

The Egrets were quite timid. Perched on high stubs, singly or in small parties, they would crane their necks at the approaching boat and fly all too soon. If one happened to perch lower down and we were able to approach it closely under cover, it would be off the instant we showed ourselves and before I could get an unobstructed view with the camera. So photography, it must be admitted, was difficult and vexatious.

But it was a wonderful sight, well worth travelling far to

see. Upon any sudden noise, hundreds of these different herons would spring from the trees everywhere about. Then they would return and alight upon the tree-tops, the delicate snow-white plumes from the backs of the Egrets straying out bewitchingly in the breeze. Nearly all day we paddled

EGRET WATCHING APPROACH OF BOAT

about amid the lacustrine forest, and I revelled in the sights and sounds of this wonderful place, which is probably the largest, and perhaps the only large, Egret rookery in North America. The only reason that it exists to-day is because it is guarded by armed wardens who will arrest, or, if necessary,

shoot, any person found upon the property with a gun. And where is it? May my tongue cleave to the roof of my mouth, if I reveal the Egrets' secret.

This whole business of the slaughter of the white herons — to say nothing of other birds — for their plumes for millinery purposes is one that every lover of nature and every person of humane feeling who understands the case will regard as no less than infamous. This is one of the moral questions — to be classed with the opium traffic and the slave trade — to which there is but one side. The origin of this trade is ignorance on the one hand and greed for money on the other, and there is not one true word which can be said in its defence.

It should be understood at the outset that these plumes — which are variously called by milliners "aigrettes," "stubs," or "ospreys," and are dyed to whatever color is fashionable — are borne by herons, and only during the nuptial season, and can be secured only by shooting the birds when they have assembled in colonies to breed, when their usual shyness has departed, owing to the strength of the parental instinct. Returning to their nests, they are shot down and their young are left to starve.

Let it be nailed as a trade lie that these plumes are secured in any other way. I do not think that it can be said that I do not make use of my eyes; yet in all my explorations of these rookeries I have found but ONE solitary "aigrette" feather, badly worn at that. It is inconceivable, impossible, that any one could find them in paying quantities, scattered about in these morasses and jungles. NEITHER ARE THEY MANUFACTURED. This lie has also been "nailed," as when recently a leading firm in England, — for whom the claim had been made, — though challenged to show one single manufactured plume, was unable to do so. Manufactured aigrettes and hens' teeth belong to the same class.

This traffic has almost exterminated the two plume-bearing species of white herons found in the United States, — the Snowy Heron, a small species, with curling plumes, and the much larger American Egret, with straight ones. There are several other closely similar species in South America and

FEMALE EGRET ON HER NEST

in other parts of the world. At the present rate of destruction, a decade or two more will make each of these American and foreign herons as extinct as the wild buffalo and the Great Auk. Then where will woman get her aigrettes? Why could she not just as well cease wearing them now as a dozen years hence, and save these harmless and beautiful birds to fill their proper place in the natural economy?

That the work of destruction is going on with rapidity, one cannot fail to realize who has been to Florida. There, years

ago, these beautiful and spectacular species of water-fowl were to be seen nearly everywhere. In 1903 I had hard work to find a few scattered colonies in the remotest and wildest parts of the state, in the unsurveyed and trackless swamps of its lower end. Mr. F. M. Chapman went there last season and found them all practically annihilated. The same is becoming true even in southern Brazil.

When we know about the millinery plume trade, we understand the reason. In 1903 the price for plumes offered to hunters was $32 per ounce, which makes the plumes worth about TWICE THEIR WEIGHT IN GOLD. There will always be men who would break any law for such profit. No rookery of these herons can long exist, unless it be guarded by force of arms day and night.

Here are some official figures of the trade from one source alone, of auctions at the London Commercial Sale Rooms during 1902. There were sold 1608 packages of "ospreys," that is, herons' plumes. A package is said to average in weight 30 ounces. This makes a total of 48,240 ounces. As it requires about four birds to make an ounce of plumes, these sales meant 192,960 herons killed at their nests, and from two to three times that number of young or eggs destroyed. Is it, then, any wonder that these species are on the verge of extinction?

The killing of these white herons — and others, as well — is now punishable with heavy fines, and the Milliners' Association of America has pledged itself not to deal in these contraband plumes. Yet they reserve the right to sell FOREIGN plumes. Now it happens that these same species also breed in Central and South America, and also that the plumes of distinctly foreign species of white herons are so exactly similar to those of our native ones that not even the most expert ornithologists can tell them apart. This means

the nullifying of our present laws, as it is practically impossible to secure evidence of their violation on the part of the dealers. It also means, unless some adequate means are found, the inevitable destruction of all these beautiful species from the face of the earth.

In these days there is arising a many-sided and tremendous problem in regard to saving the natural world from ignorant, short-sighted, commercial vandalism. Every tree must be cut down, every plant pulled up, every wild thing slaughtered, every beautiful scene disfigured, if only there is money to be made from it. What remedies are there to propose?

Regarding the herons, an agreement on the part of all the nations concerned to penalize the killing of these birds and the possession (including wearing) or exportation of all such plumes would be excellent. Meanwhile, in our own country, the POSSESSION of all such plumes should make one liable to the fine for killing a heron, which, in Florida, is $500. How many aigrettes would then be bought and worn, pray tell!

Then, too, there should be carried on all the time a campaign of education, not simply about this single matter of the "aigrette," but to arouse sympathetic interest in the lives of all harmless wild creatures, that people may learn to realize their value and desire not to kill, but to protect them. Teachers should so teach their scholars, parents their children, the clergy preach to their congregations with no uncertain voice, that no one may in future have an excuse for ignorance and thoughtlessness of this important subject.

In these enlightened days it should be a matter of moral principle with every true lady neither to wear aigrette plumes nor any plumage of wild birds. Even if we grant that man has a right to the lives of wild creatures, this millinery use of birds is too costly from other standpoints. It is a dangerous

thing to overturn the balance of nature. Destroy our birds, and very soon we find calamity overtaking our harvests, orchards, lawns, or foliage, costing untold millions of money to the nation.

If women would not buy these slaughtered remains, with the absurd idea that they are ornamental, men would not shoot the poor things for the millinery market, so that the responsibility for certain sad and irreparable losses must be laid to woman. Otherwise millions of beautiful birds would add charm and interest to what are rapidly becoming well-nigh silent landscapes. Multitudes of children, youth, and adults are studying birds afield, finding pure delight, intellectual uplift, cure of care, incentive to outdoor exercise, with consequent gain to health and prolongation of life. Attendants and nurses in sanitariums are pursuing courses in bird-study, in order to interest their patients in out-of-door things, to the saving of health and life, in these days of nervous strain. Every woman who wears feathers of harmless or useful wild birds is making herself a stumbling-block in the way of all this good, and is, even though thoughtlessly, an abettor in the ultimate destruction of our bird-life, which is certain to come, if the present course is pursued.

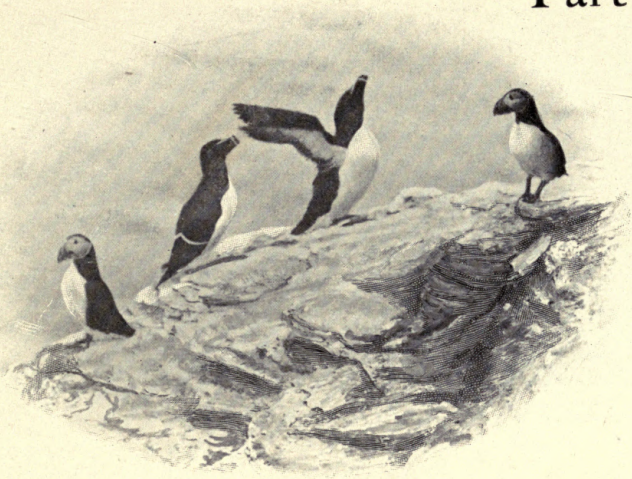
I venture to ask whether the millions of people who to-day love wild nature have no rights which deserve respect, and whether the same sordid spirit which placards the beautiful country, particularly along the railways, with its hateful bill-boards about whiskies, worthless pills, and the like — I for one make it a principle to boycott all firms that so advertise — is to ride rough-shod over us at the decree of a barbarous fashion that commands us to revert to the scalps and trophies of savagery, even though it devastate and destroy the beauty of God's wonderful world. Theodore Roosevelt has written:

"Spring would not be spring without bird-songs any more

than . . . without buds and flowers, and I only wish that besides protecting the songsters . . . we could also protect the birds of the seashore and of the wilderness. . . . The loss of the wild pigeon and Carolina paroquet has meant a loss as severe as if the Catskills or the Palisades were taken away. When I hear of the destruction of a species, I feel as if all the works of some great writer had perished. . . . Half, and more than half, the beauty of the woods and fields is gone when they lose the harmless wild things. . . . They add immeasurably to the wholesome beauty of life."

YOUNG EGRETS NEARLY FLEDGED

Part III



The Sea, The Sea

Presently they heard the soldiers shouting,—
"The sea, the sea!"—
And cheering on one another.

XENOPHON.

The sea, the sea, the open sea,
The blue, the fresh, the ever free.

CORNWALL.

GANNETS LEAVING NORTH BIRD ROCK

CHAPTER IX

TO BIRD ROCK IN AN OPEN BOAT

Come on, sir; here's the place: stand still. How fearful
And dizzy 't is to cast one's eyes so low.

SHAKESPEARE, "King Lear."

ONE short experience of such a miracle of nature as Bird Rock is as tantalizing as a glimpse into Paradise. Ever since the famous rock, with its beetling cliffs and whirring multitude of sea-fowl, faded from my sight four years ago on that dark evening, angry with the threat of storm, it has periodically risen before my imagination. Again I could seem to hear the crash of the surf against the cliffs, the varied voices of the birds forming with it a grander symphony than any human orchestra could play. It was only a question of time when I must return, especially as there was another and impelling motive to enforce this desire. Since

my previous visit I had secured a photographic equipment of rapid lens and shutter suited for picturing birds in flight. The thoughts of the results obtainable with such an instrument by a practised hand upon these ledges crowded with sea-birds was enough to keep an enthusiast awake at night. Previously published pictures showed the birds mainly in repose. Now one might hope to portray them in all their wild activities.

Hence it came about that a party of four reached the Magdalen Islands on the seventeenth of last June, and took up quarters upon Grosse Isle, to make some researches there among the northern birds, and to go to the Rock upon the first favorable opportunity. It was a promising beginning that within half an hour of landing I found a nest of the beautiful Fox Sparrow containing four heavily marked eggs. Close upon this followed from day to day discoveries of nests of interesting shore-birds, ducks, and other birds of water and land. Yet Bird Rock was our Mecca. From the great headlands we could see it on clear days grimly towering far out to sea, and at night watch the mocking twinkle of its light — elusive and baffling indeed, for we were stranded. The large schooner we had hoped to engage had gone off on a protracted voyage, and there was no other. A small tug that had recently come to Grand Entry had broken down and was unseaworthy.

Either we must give up our cherished project or go in some small open fishing-boat, if, indeed, we could find a man who dared attempt it. Fishermen shook their heads. The Rock lies out toward Newfoundland and Labrador twenty-two miles as the murre flies from Grosse Isle. There is only one possible landing-place under the tremendous cliffs, a pile of jagged rocks which have fallen down on one part of the west side, upon which, as against the cliffs themselves, the

surf beats almost ceaselessly. For weeks, oftentimes, there is no interval when it is possible either to land or to launch a boat. Much of the time the lonely crag is shut in by the gray walls of the fog; even more often does the wind heap up the

"THE FAMOUS ROCK, WITH ITS BEETLING CLIFFS AND WHIRRING MULTITUDE"

forbidding surf. Arrive off the Rock in a sea-going vessel, and you may have to "lie off" for days before a landing can be made. Reach it in an open boat and find it impossible to land, and there is no telling what might occur. Let the wind breeze up strong, contrary for a return to shelter, and where would one be? Let the ever-ready fog shut down, and what assurance is there of finding that atom amid the great waters, or even of returning to the Magdalen Islands?

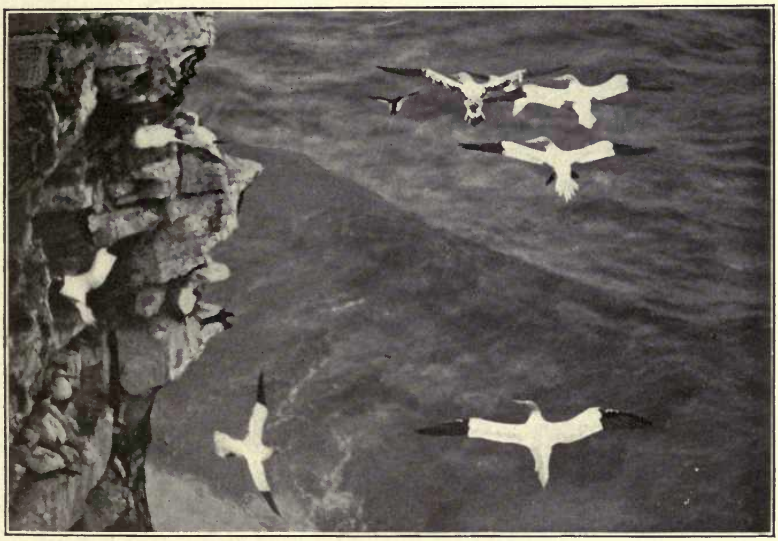
Several parties before us had tried conclusions in an open

boat, and, as far as we could learn, none had succeeded in the attempt. One, I think, had been unable to land; another had missed the Rock in the fog; another had been even worse lost, had tossed about on a cold, angry sea for an indefinite period, with one of the men sick and nearly dying from fright and exposure. It was not an alluring prospect, and, to be honest, we rather shrank from it. Yet we did badly want to get to Bird Rock, especially after coming so far.

Now there was at Grosse Isle a certain young fisherman of twenty-four — I will not say summers, but winters, Magdalen Island winters at that, with their long months of below zero temperatures and silence of frozen death. These winters, in their rough way, had dealt kindly with the youth, and had fashioned him into as hardy, muscular, and daring a type of manhood as it is often one's fortune to see. The turbulent sea had no terrors for him, as he hauled his lobster-traps in the gale of wind and at off times helped to smuggle over valuable cargoes of French wines and liquors from St. Pierre. He was the man who volunteered to sail us over in his seventeen-foot open lobster boat any day when there was any sort of a chance. So we cheered up and lived in hope.

Our plans gave us but ten precious days. Half of them passed, unfavorable. At first the sea was rough after a previous gale. Then set in a cold, blustering norther, when we had to run and beat our hands to keep warm, in our winter clothes at that. Next followed a southeast blow, rainstorm, and fog. The sixth day was clear, but the sea was rough. Time was now alarmingly short, and we were becoming anxious. We spent the morning in the spruce woods, and noticed that the wind was moderating. At eleven came a boy with a message from our bold mariner. He would sail for Bryon Island as soon as we could get ready, and thence try for Bird Rock next morning. Hurriedly finishing my camera

work on the nest and eggs of a Blackpoll Warbler, we returned to the house, ate dinner, packed our bags, and were off at two o'clock under two sprit-sails, with a moderate, fair wind. Bryon lies twelve miles to the north, and Bird Rock twelve miles farther to the northeast.



GANNETS AND MURRE LEAVING NESTS
(One of the Gannets is in the mottled second-year plumage)

Every hour, as we proceeded, the heavy ocean swell seemed to go down. "What do you say," said I to the skipper, "to keeping on for Bird Rock to-night?" "I was just thinking of that myself," he replied. "Suppose we land on Bryon and look over on the north side, and, if the surf is not heavy, try our luck?" At five o'clock we ran into a cove and leaped out upon the cobble-stones, where the "king" of Bryon Island gave us a royal reception. Keeping a little store, he sells supplies to the few fishermen who during the lobster season

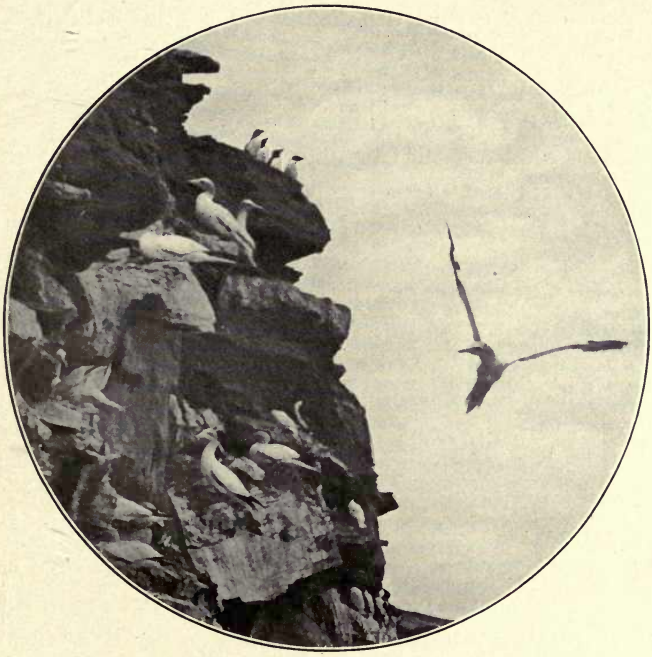
lease land from him and pay a fee for the fishing privileges. He is monarch of all he surveys, yet glad of the rare glimpse of strangers from the great and distant "world," especially of Americans, to whom he would gladly sell his big island, with its fine fishery privileges and supposed mineral deposits, for thirty thousand dollars. In the half hour of our stay he was so overwhelmingly kind that I shall do all I can to help him advertise his wares.

The sea was fairly quiet upon the north side, and the "royal" advice was strongly in favor of starting at once for Bird Rock, as the weather indications were suggestive of wind and plenty of it before long. So we sailed away, with the dying breeze following gently, directly from astern. In an hour we had made good progress, yet Bird Rock, which we could see, was still but a distant haze, and it was already evening, by the watch. Oars were brought out, and they and our backs bent to the task. At eight, as the sun sunk below the sea to the northwest, the Rock looked near, but it was half-past nine, under the last fading rays of the day and the silvery light of the welcome moon, when the great stately cliffs at last towered above us, and the sea-birds screamed and issued forth to meet us in the clouds of ghostly forms.

Already had the dynamite bomb crashed in welcome. A form hurried down the ladder, and a lantern waved from the pile of rocks, signalling to us where to make the venture. Calm as was the sea outside, some surf was rolling in upon the ledges. We must run the gauntlet and take our chances; there could be no backing out now. So on we went to our fate. A sudden concussion almost threw us off our feet; we had struck a submerged rock. Then a following wave picked us up and hurled us against the pile. We all leaped out and held the boat against the undertow, and with mighty efforts, helped by succeeding waves, got her up a few feet farther.

GANNETS AND MURRES INCUBATING

The keeper from above was lowering the cable by the steam winch. Meanwhile the seas were battering the stern and combing over on deck, filling her with water. With desperation we were all scurrying in the darkness to get our stuff out before it would be soaked, and to throw overboard the rock



GANNET RETURNING HOME

ballast. We were wet, but what matter; everything was landed. No, who has seen my carrying-case and plate-holders? Horrors! One of the party is fishing them out of the water, and emptying out the brine in quarts. Somehow in the excitement they have been left in the stern, and the surf has done the rest. Perhaps it is all up with my photography!

There is no time to stop to grieve. The boat will be stove to pieces soon. Down comes the wire cable, with a rope to gird under the boat. A dash or two into the surf, and it is done. Now hoist away. Slip and crash! The stern goes bumping over the rocks. "Hold hard, there!" United yells convey the intelligence up above. The cable slackens. Again the rope is secure and the heavy boat goes sailing, as she never did before, up into the darkness, like a phantom-ship. They swing her in upon a ledge, and at last we all are safe. We release the rope, the cable goes up and returns with the crate, into which we put our baggage, and then we climb the ladder with Keeper Peter Bourque, who has come down to learn who has arrived and to welcome whomever it may prove to be.

Up in his lofty home, by his warm and welcome stove, this twenty-third of June, my first task is to throw out all my wet plates and set up the soaking holders to dry, while I renew my friendship, and introduce the others to the keeper, his nephew, and two young lady daughters. They are all radiant, for since the fifth of the previous November, when the government supply boat made her last call, they have seen no other human beings till now, save some fishermen who landed on the twenty-ninth of May. All that terrible winter they were frozen in. Navigation was closed. There was no need to light the torch for mariners, or to fire the bomb signals in the fog. All they could do was to maintain the struggle for existence. The ice enclosed them in November, and granted a possible release not until the middle of May. Even now they had received no letters or papers since November. With his glass the keeper had seen us before we had come a mile from Bryon, and all hands set to work at once to write letters, knowing that so small a craft could have no possible destination beyond Bird Rock. And so, with tales of the

herds of seals which in thousands had been forced in around the Rock during March by the jamming ice-floes, the evening passed. At midnight we retired, but before that we could hear the screaming of the rising wind. The gale had started

PUFFINS LEAVING THE ROCK

in again, two hours after we reached the Rock. Had we been only a little later, our plight would have been something unpleasant to contemplate.

The night was short indeed, for at a reasonably early hour I was out among the birds. It was a magnificent sight! The wind was blustering from the southwest, the sky clear, and the sea an angry array of white-caps, with surges thundering against the cliffs, and our landing-place a raging caldron of breakers. But the birds! The keeper's belief that they had increased during the last four years was certainly right. The

ledges were crowded, the air was full of them. It takes a windy day to show Bird Rock at its best. Then the birds are constantly in motion, apparently from the very love of flight. Those that must incubate do so for but a few moments, and then are off for a spin and circuit out over the water, ere they return for another short vigil.

The most notable increase, I think, has been among the Kittiwakes, the beautiful pearly-mantled white gull that nests in the niches of the cliffs. Perhaps they are now the most numerous species. About equal in number are the great Gannets, the largest of the inhabitants. Their accustomed ledges were all filled, and in the distance I could see that the summits of the three parts of North Bird Rock, three quarters of a mile away, were literally white with them. The Murres probably come next, and have more than held their own. The Brünnich's Murre is much more numerous than the "Common" kind. As before, there are only a few dozen of the "Ringed Murre" type or phase, of uncertain classification. The Razor-billed Auks are about as numerous as the Murres and have certainly multiplied, but the Puffins have possibly decreased slightly in numbers. As for the Petrels, I saw and heard nothing of them, though there are a few in the burrows.

After breakfast I filled my plate-holders, now dry, though somewhat warped inside, and began the work. I had a capacity of thirty plates with my reflex camera and of two dozen with my Century. As a matter of fact the former was the only one I used. When the thirty plates were exposed, I went into the cellar, which I had darkened, packed away the exposures, filled the holders, and went out for another batch of pictures. The wind was so violent that it was practically impossible to do any tripod work.

During the morning I made snap-shots at flying birds, and took the precaution to develop two plates in the cellar, thus

KITTIWAKES ON THEIR NESTS

assuring myself that the exposures were rightly and fully timed in giving them about one eight-hundredth of a second. I also climbed down the ladders at the southeast corner and took note of the Murres and Razor-bills. At the top I snapped at birds passing a fixed point off some projecting rock, or as they alighted or left, as well as at passing Gannets. Murres and Kittiwakes nested mostly down below. The afternoon was devoted to descending the main ladder on the west side, and from it photographing Kittiwakes on their nests, and then clambering around and up toward the north, where there was a splendid array of birds, a wonderful sight.

PARTY OF RAZOR-BILLS, ONE SHOWING PECULIAR STRADDLING ATTITUDE IN FLIGHT

Late in the day one of my friends lost his big reflex camera down the cliff. He was on the ladder, when the snap of his strap slipped off and his camera went ricochetting down, smashing to fragments on the rocks below, though the valuable lens was, wonderfully, quite unharmed.

Great changes have been made at this western landing-place. Last summer fifty workmen were employed in blasting out a cut into the cliff, so that there will be a stairway of about sixty degrees ascent. As yet it is unfinished, and one has to climb three quarters of the way on ladders. There is a little landing-jetty, but it was not yet built far enough out, and the way the surf was dashing over it made one doubt its usefulness.

Next morning, Saturday, June 25, the wind had shifted to

the northeast, and was beating down the sea. It was moderate, and very few birds were flying, nearly all being at their nests. We took the opportunity, after working at various ledges, when the swell had materially lessened, of having a dory lowered by the steam winch from the top and rowing over to North Bird Rock. The sea was breaking upon it quite hard, but we ran the gauntlet, and landed safely on the spit of gravel. Meanwhile the birds were flying off in wild confusion, the Gannets from the top and the Kittiwakes from their nests in the niches of the cliff, with some Murres and Razorbills. We gained the summits of each of the main sections by scrambling up forty feet from ledge to ledge, aiding each other in turn. The first man up, as he raised his head above the summit, found himself face to face with a Gannet, which squawked with terror and launched forth in flight — fortunately not into his face. The whole flat area of both parts was covered with the rude seaweed nests of the Gannet, each with its dirty-white egg. No one had landed this year to rob them, either here or on the main rock, and the birds were having

GANNETS NESTING ON THE TOP OF NORTH BIRD ROCK

a splendid season. A group of half a dozen Gannets stuck devotedly to their nests and allowed us to photograph them as near as we desired. When I pushed at one with my foot to make it change its attitude, it merely raised its head and squawked angrily. Those on the "Pillar," the isolated crag out in the water, remained peacefully on their nests while we photographed them.

We had about two hours on the Rock, when the keeper fired a bomb for us to return, as the barometer was falling and the wind increasing. After dinner I changed plates again, and three of us were then lowered down in the crate to photograph Kittiwakes and Murres. It gives a somewhat uncanny sensation hanging in mid-air, at times spinning around like a top. But we forget that in gazing at the Kittiwakes peacefully upon their nests, or launching forth and returning. Usually there were two eggs to a nest, in some cases three, or only one, the latter, probably, in cases where one or more had rolled out. A few nests already contained young. The Murres shrank back bashfully against the wall of rock under our interested gaze and the aiming of cameras. In some cases the birds were but five feet from us, but they had become accustomed to the passage of the crate.

We had intended to remain upon Bird Rock one more day. But late in the afternoon the keeper told us that the barometer was still falling and that it would undoubtedly storm the next day, and it might be another week before the sea would calm down again. The wind was fair; and for our good, in order to catch our steamer, he advised us to start back that afternoon. This we decided to do. Before that, I again climbed by a ladder halfway down the cliff at the north end, and crept along the narrow ledge out to the northwest corner, where I exposed my remaining plates upon the splendid array of birds on the ledges spread out before me,

and at flying individuals of the great Bird Rock host, which the keeper believed numbered ten thousand.

By six o'clock we were ready for the start. The crate, heaped with baggage, was lowered, while we, after hearty farewells, climbed down the ladders. The sea was wonder-

BRÜNNICH'S MURRE BY ITS EGG. "SHRANK BACK BASHFULLY"

fully quiet, for Bird Rock, and at half-past six we were safely launched, and sailed away, exchanging gunpowder and dynamite salutes with the good people who had treated us so magnificently.

It is splendid that the fine bird colony is doing so well. The keeper has orders from the British government to prevent

all depredations upon the birds. Yet he ought to have more done for him, a telephone or telegraph to the Magdalens, and more calls of the government supply boat. Left as he is, he must depend largely upon casual vessels, and he can hardly afford to prevent the visitors from egging and shooting, lest they, in retaliation, forego their favors.

From the very start the wind began to die down, and before long it was flat calm. We never shall forget that night, throughout which, taking turns, we toiled at the oars. Yet it was grand. The aurora borealis flashed, the full moon smiled benignantly upon the placid ocean, the effects of its soft light being wonderfully varied by the majestic streamers of clouds which sailed across its face. As we approached the Magdalens, a Petrel fluttered close round us several times like a bat, and a party of Loons uttered their long-drawn, wailing screams. At two A. M. the dawn was evident, and at half-past two, in the broad daylight, we beached our craft at Grosse Isle, the skipper firing salutes with his gun to wake up the fishermen to help haul up the boat. And then it was that he wittily bestowed upon the company, in the name of the great Magdalen University of the northern seas, the honorary degree of "S.S.D.," — sad sea dog, — which is to be granted only to those who successfully make the trip to Bird Rock in an open boat.

Arousing the family, sore and weary, we took to our beds, and slept till nearly noon, awaking to find that the expected easterly storm had set in, and the shore was white with breakers. Once more we had been just in time. And yet, though fortune did favor us by a scant margin, we are not advising others, if they can possibly charter a sea-going vessel, to attempt the trip to Bird Rock in an open boat.

PAIR OF HERRING GULLS. "ALLOWED ME TO APPROACH"

CHAPTER X

AMID NORTHERN SPRUCES AND SEA-GIRT ROCKS

Deep from its rocky caverns, the deep-voiced neighboring ocean
Speaks, and in accents disconsolate answers the wail of the forest.
LONGFELLOW.

WHENEVER, in making a camera-hunting trip to the north, I begin to see the spruces and balsams with their pointed tops, I seem to enter a special sort of holiday atmosphere. The landscape is full of "Christmas-trees." They are characteristic of the north, and I am conscious of being in a northern latitude. The air feels colder, whether it really is so or not. Indeed, I can almost imagine that the branches of the trees are laden down with snow, and that it is the Christmas season. I associate these trees, too, with the dearly loved mysteries of the migratory northern

birds — rare and beautiful warblers, thrushes, and finches — which nest in the fastnesses of their densely tangled needle-foliage. Coastwise, I associate them with wave-lashed cliffs or island shores strewn with stones and boulders, where sea-birds congregate. So spruces or balsams, rocks, waves, and sea-fowl, all fit harmoniously into the scenes which I shall proceed to describe.

Away off the southeastern coast of Nova Scotia, about twenty miles out to sea, lies Seal Island, an ideal place of the sort I have in mind. It is three miles long, densely overgrown with spruces, which shelter many interesting northern birds. Flocks of Crossbills, roaming through them, would make one think it was suddenly winter, and a cold one at that. This island forest is a great resort for the Bicknell's Thrush, a bird rather hard, ordinarily, to find and study. All through these woods, as well as in open places, the singular Leach's Petrels — one of several species called by sailors "Mother Carey's Chickens" — dig their rat-holes of burrows, and each female lays a single white egg. The great white Herring Gulls have from time immemorial nested there in thousands, with hundreds of the Common and Arctic Terns. Most of the shores are sandy, but some of them are heaped up with cobble-stones and boulders of all sizes and shapes, rounded by the mighty power of the waves. Among these, hundreds of the Black Guillemots — also called Sea Pigeons, or Sea Widgeons — lay their eggs, with a few Puffins. The island is owned by Mr. John Crowell, all except for the government station on which the lighthouse stands, of which he is keeper. A very few fishermen are also there, most of them only during the fishing season. They come and go in small sail-boats, and there is no communication, save casually, with the outside world.

Some years ago I stopped on the island over one night,

and saw enough to rouse a strong desire for a longer stay. Various plans to repeat the trip had fallen through. But now, as a party of us were returning from the Magdalen Islands, the time seemed opportune. So, before crossing by steamer from Yarmouth, Nova Scotia, to Boston, we branched off on a new railroad, completed only as far as Barrington, on the way to Halifax. None of the station-agents in the northern part of the Province knew the name of this road, or, indeed, of its existence, and our plans were long in delightful uncertainty. Fortunately there was a connecting train; and the night of the last day of June found us at Barrington Passage, ready to be sailed across to Seal Island.

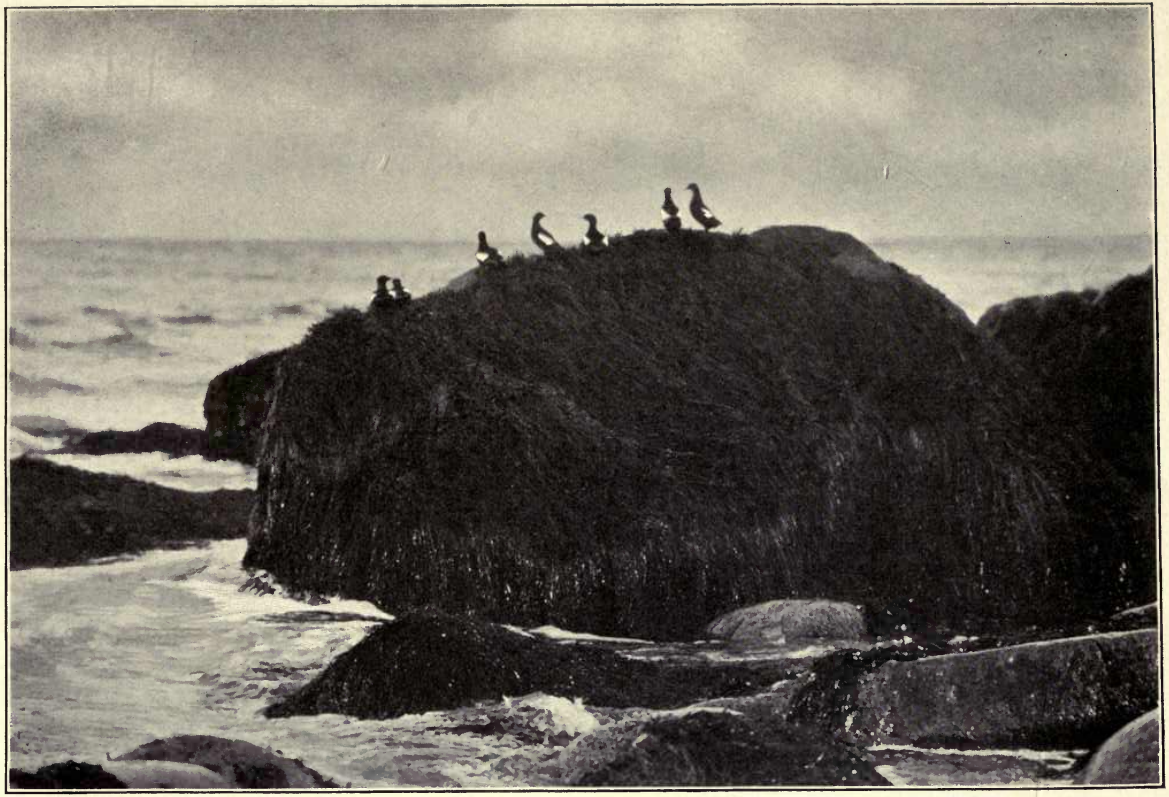
Though a Nova Scotia fog prevailed that night, we were not worried about reaching the island. We had just been to Bird Rock, far more inaccessible, in an open boat, and this trip seemed like small game in comparison. So we confidently engaged a skipper and sail-boat, and slept the sleep of the just. Yet that twenty-mile stretch of ocean between Cape Sable and Seal Island is as rough and dangerous an area as can well be found, with its powerful currents, tide-rips, cross-seas, and sunken reefs. To traverse it even in fair weather is no boy's play, and much less now when we arose and found weather conditions of thick fog, rain-squalls, and a heavy wind from the southwest, directly ahead. Our skipper confessed his inability to get us to the island in his little cockle-shell, and suggested that we try to engage some larger craft. We spent half the day trying to bribe various owners to undertake it by sail or steam, then gave it up, and explored the wet and dense spruce woods. The following day was just as bad, with no sign of fog or wind letting up. No one would start, and we began to feel rather blue, when by great good fortune we met a man who was part owner of a wrecking-steamer which had recently put into a neighbor-

ing port. For a comparatively moderate consideration he offered to take us across that afternoon.

In due time we found ourselves out in the dense fog, the steamer rolling her rails under as the great ocean swells hurled themselves against her. It was no wonder that the fishermen did not care to attempt it. Now and then a Sooty Shearwater, wild wanderer from the Antarctic Ocean, on long, narrow wings would come sweeping along the trough of the sea and then go scaling over the crests to windward. While man may be struggling and drowning, they are merry and fearless. But now, though we did roll heavily, we were climbing the old seas offshore at a steady pace, and every foot was so much nearer Seal Island. Sails are pretty, but when for days one has been baffled and beaten, he believes in steam.

At length the fog began to lift, which, with the lessening of the swell, indicated an approach to land. Then the long-lost sun beamed out over the tossing water, and Seal Island began to emerge from the mist. Soon we could clearly see its spectacle-shaped form, the two lobes with their dense spruces and rocky shores, and the connecting bridge of sand. From the thick forest of the southern lobe stood out the white lighthouse tower, and above the dark foliage of both the white Herring Gulls were hovering, in beautiful contrast. We were approaching the eastern side, which was under the lee, so the sea was not rough. Coming to anchor, we were set ashore in a dory on a conveniently built slip in the cove, and were soon enjoying the bountiful fare and hospitality of the owner of the island and his family. For several days, now, the weather was, for the most part, fair, and I was able to spend the whole time in studying and photographing the birds.

Our nearest neighbors were the Black Guillemots. Back from the house, a short road led down through the spruces

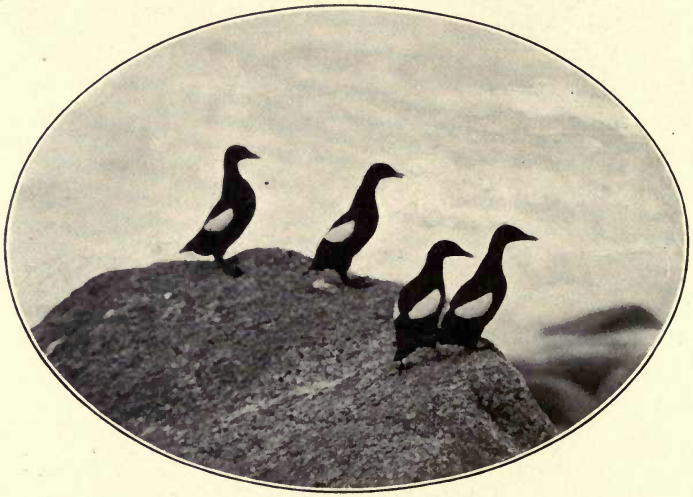


BLACK GUILLEMOTS AND THEIR HAUNTS

to the steam foghorn building, located just up from a very rough, rocky shore. This is a cobble-stone beach, composed of rocks rounded by the action of the waves, varying from the size of a man's head to that of a haystack. Resting upon the tops of the larger ones were groups of these curious birds, about the size of small ducks, enjoying the sunshine. Their plumage is entirely black, except for a large oval patch of white on each wing, which shows very conspicuously whether they are sitting or flying. Other parties of them are out on the water, a few rods offshore. They ride easily on the swells, which, after passing them, break as surf upon the rocks. Their food is fish, which they secure by diving. One by one they plunge and disappear, remaining under water for as much as a minute at a time. No doubt they improve these moments of submersion, for they appear well-fed and plump enough. After a spell at fishing or playing about in the water, they will start to fly, sometimes singly, sometimes the whole party at once. Their wings beat very rapidly and they pass the rock almost like bullets, their bright carmine feet and legs dangling conspicuously behind. Often, when I sat quietly among the rocks watching them, they would alight one after the other upon some boulder quite close to me, and then step about, turning this way and that to look me all over, not so much in fear as in curiosity. Their legs are set so far behind them that they walk almost erect, like penguins or murres. When they have satisfied themselves, they squat or lie down, others coming to join them from time to time, till there are a dozen or more in the party.

No one would call them communicative. The only sound they make is a shrill, rather faint whistle, which is not audible at any great distance. Perhaps they make up for this comparative muteness by their varied and expressive gestures.

In this way the little black imps strike one as comical, quaint, almost pompous. Especially when they make love, it is worth a great deal to watch a couple facing each other, sidling about, the male — probably it is — going through a series of dignified bowings and attempted caresses, until one might well laugh aloud and frighten the performers.



BLACK GUILLEMOTS. "CURIOSITY SEEMS TO BE ONE OF THEIR MOST STRIKING CHARACTERISTICS"

Curiosity seems to be one of their most striking characteristics. Naturally rather timid, they will usually fly before one can walk up boldly very near them. But what a great difference it will make if one tries to sneak up behind the rocks! An occasional glimpse, though it reveals the presence of the intruder, does not really alarm them. They do so wonder what he is up to, what sort of a body is beneath that bobbing head, perhaps what sort of shoes he wears, that they forget all about flight. When very near, he can gradually and

deliberately rise into sight, looking into the hood of his camera, and snap them as they hesitate. Then, sinking down quietly, he can change the plate behind the rocks, and have another shot if he will, perhaps this time advancing a few steps nearer, until they begin to get uneasy. He must stop then for a moment, and they will recover confidence, and let him come still nearer. In this way I easily secured all the pictures I wanted. They are, on the whole, sociable little fellows, yet I could not but wonder how they enjoyed that terrible foghorn which roars away twice a minute, day and night, whenever foggy weather prevails, and kept me awake all one night.

Most of these birds on the rocks, presumably, are the males, though they, indeed, take their turn upon the eggs. Under our very feet their wives may be brooding each her beautifully marked twin eggs. Nesting is a very simple process. All the preparation needed is to crawl in between and under the rocks, perhaps down through several layers, and select a spot where there is a little gravel washed in, upon which the eggs will be laid. Sometimes the sitting bird, upon hearing the approach of an intruder, flies out, and he can mark the spot where her nest is. But just as often, especially when the eggs are well hidden, she will remain upon them, refusing to come out for anything that may be done. A good way to find nests is to follow Keeper Crowell's dog. He cannot detect eggs beneath him, but he can infallibly scent the bird when she is upon the nest, and will gaze down the crevice intently, whining and wagging his tail.

It is possible to photograph the strange bird upon or by her eggs. Realizing that she is cornered, she will not attempt to fly out. So we manage to pry or roll away the rocks one by one, and presently we see her squatting down in the dark hole. When it is opened to the light, the bird may shrink

from the eggs, or try to crawl back farther among the rocks, but we can probably catch her and replace her. A long timed exposure is necessary, so the camera is set upon the

BLACK GUILLEMOT OVER HER EGGS

tripod and focused on the bird. The greatest difficulty is that she is apt to turn her head at the critical moment. One may spoil a plate or two, but a few exposures of from five to ten seconds will probably give some good negatives. Look out for accidents: a rock may suddenly slide and roll; the camera may slip and fall on its face on rocks that are not soft; the bird may make a sudden exit, and the photographer must be ever ready to seize her, without wrecking his apparatus. Once my anastigmat lens, pointed nearly straight down,

fell out upon the rocks, and it was a mere chance it was not ruined.

By far the most abundant bird on the island is the Herring Gull, the common large white scavenger of our harbors in the winter season. They nest in scattered colonies all over the island, mostly in the woods or openings in them, also in tracts of "stump land" along the shore, where the woods have been cut off.

The largest of these colonies is in the midst of the woods on the northern lobe of the island, and it was the first one we visited. After a two-mile walk along the shore, we struck in by a sheep-path through the thick spruces. Soon we began to hear the screams and cacklings of the gulls and to see the great white fellows flying over the trees above us. Now and then we passed a bulky nest of sticks, grass, and seaweed in the thick top of a tree, whither persecution often drives these otherwise ground-nesting birds. Presently we emerged into a partially open area where the trees were scattering. Several hundred gulls were flying about excitedly, making a great racket. Their nests were scattered about on the ground, usually at the foot of a tree or under a young spruce. Two or three large, drab-colored eggs, spotted with black, are the usual laying, but many of the nests were empty. Fishermen had recently landed and robbed them.

On the previous visit the gulls had boldly circled about close over one's head. Since then they have been robbed and shot until they are now nearly as shy as hawks. Indeed, in the first colony visited, I could not get near enough to a gull to secure a single satisfactory photograph, and I felt pretty well disheartened, especially after making such an effort to reach the island.

Retracing our steps, we followed the shore along the northern end. Groups of seals, or single ones, basked upon

the rocks that stood out of the water. Pairs or groups of Eider Ducks were swimming here and there not far off the rock-strewn shore, the white-backed males very distinguished

HERRING GULL LEAVING THE DEAD TREE

in appearance, compared with their sombre brown mates. This was their nesting-time. The female crawls up from the shore into the thick of the small spruces, and beneath the tangle deposits from five to eight large, smooth, yellowish eggs, surrounding them with a profusion of down plucked

from her own breast. On so large an island the nests are very hard to find. We spent a long time beating the bushes with clubs, hoping that some sitting bird would dash out in sudden fright. The main chance was that the dog would scent one, but the animal was old, and tired from an early hunt on his own hook, and he took but a listless interest in the search, which was not successful.

After lunching by a spring-hole, stared at meanwhile by a band of the numerous sheep that graze at large upon the island, we went on and came to another gull colony just back from the shore. Rambling off from the rest of the party, I found the birds less wary. So I let them leave me and go on, and presently, sitting in a clump of low bushes, I had the gulls flying over me comparatively near, and secured all the snap-shots I needed. They were settling down upon the trees near by, and some of the beautiful creatures, conspicuous upon the dark foliage, allowed me to approach and take pictures of them. A good way was to sit down behind a bush near a clump of spruces where they alighted by their nests, and snap them in the act of alighting or flying off. One bird constantly returned to a dead tree, and would allow me to walk up boldly within ten yards and photograph it. Thus I finally secured a series of pictures, though not nearly as satisfactory as could be obtained in some of our Maine colonies so zealously protected through the noble efforts of our apostle of bird-liberty, Mr. William Dutcher, and others like him.

This island is a great breeding resort of the Leach's Petrel, or Mother Carey's Chicken. Not one is visible by day, yet the woods and pastures by the shores are fairly honeycombed with their burrows. All we have to do, whenever the notion strikes us to examine one, is to pull up the light mouldy soil, starting at the entrance. A couple of feet along, just below the surface, the tunnel ends in a little chamber, and there sits

the little dusky, swallow-like bird, with a white rump and webbed feet, upon a single white egg. When handled they always vomit up, or eject from their nostrils, a mass of strong-smelling, yellow oil. Poor birds! every carnivorous animal preys upon them. Stray cats are here fat and flourishing, and I have often noticed the dogs chewing up a poor petrel. When I undertook to pose and photograph one that I had dug up for that purpose, I had to resign myself to a two hours' struggle with a ceaselessly active automaton that could do nearly everything except keep still. This is the pent-up energy that serves them well in their life upon the boundless deep, when for months they never approach the stable land.

Here and there, in sandy tracts above the shores, or on the stump land, are small colonies of terns, both the Arctic and Common species, I think. On the sand-bar connecting the lobes of the island there is a colony of the Arctic. When I was crossing it, the first thing I knew, one of the hovering, angry terns, darting down, struck me a stinging blow on the top of my head. Elsewhere they are usually shyer, and, delighted by this exhibition of boldness, I returned next day with my reflex camera. It must have been amusing to watch me, sitting on the sand, following with the camera the darting birds, one or another of which would land with a thud, almost momentarily, on my devoted head. Now and then, after a swoop, I would remove my felt hat to see if they had punctured it.

A pair or two of Ravens nest in the spruces, which, with numerous Crows, help to destroy the eggs and young of the other birds. The busy little Black-poll Warbler is everywhere abundant among the spruces. Not the least interesting of the Seal Islanders is the demure little grayish brown fellow, with the white and spotted breast, the Bicknell's Thrush. We meet

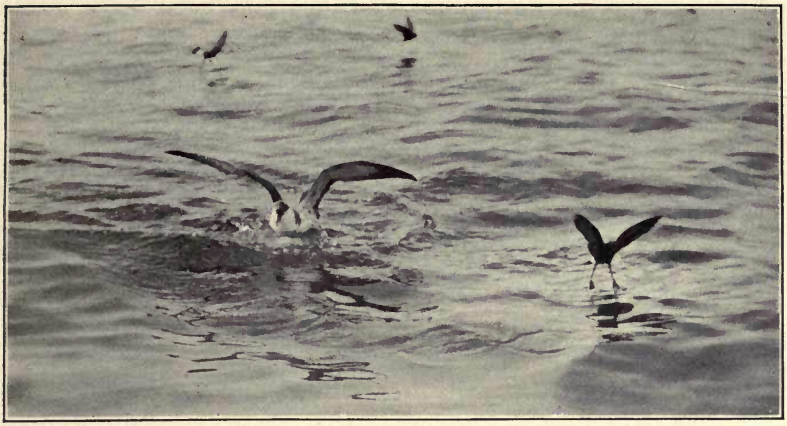
them everywhere in the woods; they stand on a branch in a thrush-like attitude and chirp, then flit on a little farther and again watch. Their nesting-time was now past, but one of the party found a nest out on a branch of a spruce, fifteen feet from the ground. It was deserted, yet in perfect order, and held one blue egg, slightly speckled with brown around the larger end.

Keeper Crowell and his family are ardent protectors of the birds. A pretty, well-educated daughter busies herself writing and posting notices forbidding people to shoot or rob the birds. But it is a losing fight. The island is too big for them to watch. The fine colonies have sadly diminished, and there seems to be no adequate law to protect them, unless the keeper takes the law into his own hands. As he quaintly expresses it, when the vandals row around the shore and shoot the defenceless breeding "widgeons," or Black Guillemots, some day he will start out and get his share of the gunning, and the boat may accidentally get in range. Once he tried this, and the birds were not troubled again for a long time. The New Brunswick laws are excellent and well enforced, and it is to be hoped that the Nova Scotia people, kind and hospitable as I have always found them to be, will come to the rescue of this fine family and see to it that a few ignorant fishermen are kept from breaking up this and other great sea-bird colonies in the Province, and driving from the coast the birds which are most useful to the fishing industry in locating the schools of fish.

Storm-bound in trying to reach the island, we were now detained upon it a couple of days by a protracted calm, which deterred the fishermen from setting us ashore. After some days, in desperation, we got one to make the attempt, and after a long day of drifting we managed to reach the mainland. Seal Island, isolated as it is from the world, seen

by few save fishermen and from vessels doubling the south-eastern cape of Nova Scotia, beaten by wild storms, picturesque with its rocks, spruces, and bird-life, is a charming little world by itself, amply repaying our efforts in visiting it, and braving the raging of the sea and the discomforts of fog and calm.

LEACH'S PETREL REMOVED FROM ITS BURROW



GREATER SHEARWATER AND WILSON'S PETRELS

CHAPTER XI

OFF CHATHAM BARS

Yet he ne'er falters, — so, petrel, spring
Once more o'er the waves on thy stormy wing.

CORNWALL.

MY very first successful photographs of free wild birds were of "ocean wanderers," taken out here on the bounding main from the unstable deck of a fishing-boat, and with an ordinary little camera. That I secured any such results at that callow stage of my experience under such conditions is now a marvel to me, after further experience of the difficulties, even with a complete modern photographic outfit. I must attribute it to consummate good luck.

Minded to have another "try" at the birds of the ocean,

I found myself again on old Cape Cod at Chatham, one fine September afternoon, and engaged a boat for the next morning to take me outside the bars. The day proved dark and cloudy, with a dead calm, so it was useless to make the attempt. Next day we were enveloped in a dense fog. The fishermen find that with fog usually comes the "ground swell," and, sure enough, next morning the surf was moaning, breaking heavily on the bars and clear across the mouth of the harbor. Thus day after day passed, and, just as the weather cleared and the sea quieted down, I was summoned home by telegraph.

In dealing with the weather, waves, and currents of such a battle-ground of titanic forces, there is no hurrying of matters, without exposing one's self to disaster. There was a time when I thought the fishermen over-cautious, but I learned my lesson. I had sailed my small sloop down from Boston, with several friends, intending to run in to Chatham. At daybreak we were off Chatham bars, the wind blowing hard offshore from the northwest, and the sea breaking mast-high clear across the harbor entrance. It was too rough to double Monomoy Point and take the gale on "the shoals," so we cruised back and forth under the lee, waiting for something to turn up. To be caught off the "back-side of the Cape" in a small craft in bad weather, with no chance to get under shelter, puts one in a not altogether enviable position.

Toward evening the wind moderated. Although the surf was still bad, at length we saw a seine-boat with a crew of fishermen dodge out among the breakers to try for a school of bluefish. We hailed them, and they agreed to pilot us in, so all boarded the yacht. With their boat in tow, one of them took the helm and headed in for the raging caldron. After a big wave had passed, we ran round the point of the shoal and were in between two breakers. How we were to

extricate ourselves, I could not see. I supposed they knew; but even experts miscalculate. We had run about midway into the entrance when I saw coming a wave that fairly appalled me. The fishermen exchanged anxious glances, and the helmsman swung the yacht to meet it, bowsprit on, while I hurriedly closed the hatchway. I can never forget the ominous look of that wall of water towering above me, before it struck. It was green and sinister, with a curling crest that rose high above our heads, like the flowing mane of a war-horse. Its onward rush seemed like the charge of a troop of cavalry. All we could do was to cling to something and take it. Then it fairly buried us. The yacht lurched violently, but did not capsize. The next thing I knew, the standing-room was full of water, the deck swept of all movable articles, which were floating or sinking out beyond us, and the seine-boat had broken away. Fortunately the strong tide was racing in, which carried us to safety before the next comber could reach us. Had the tide been the other way, it might have been much more serious for us. So, to this day, when I am tempted to be rash to secure a coveted opportunity with sea-birds, a vision of that white-crested, green comber rises to forbid.

It was two years after the unsuccessful attempt mentioned on the preceding page before I was able to try again. Another September day found me at Chatham. The next two days the bars moaned and thundered, but on the third came the realization of the great event. The Chatham cat-rig plunged and tossed considerably, but, fortunately for my water-fowl studies, my equilibrium is not easily upset. Once through the line of breakers, we took the long, even swell, and soon hove to to catch some dog-fish for livers with which to bait up birds. Of late years the cod and haddock have mostly disappeared from the coast, and it was necessary to resort to this degenerate sort of fishing to secure bait. But no one who knows

the dog-fish will waste any pity. This is a small species of shark, which goes about in schools, snapping at fish right and left, making wholesale destruction. The dog-fish were on hand and took hold with their usual greed and ferocity. In a short time we had numbers of them flopping all over the standing-room, each trying to stab us with its sharp abdominal spine. It took many heavy blows with a mallet to put them out of commission so that we could appropriate their livers, which are larger than those of most fish!

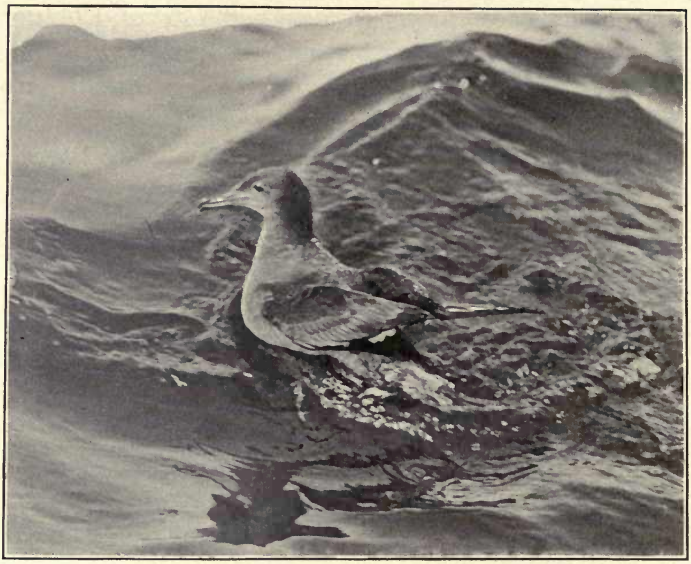
As we were doing this, we noticed off to the southward a flock of terns darting down and plunging excitedly into the water. We knew what it meant, and, hauling aft the sheet, ran off toward them, throwing out a bluefish drail astern. The school of small "bait" disappeared with a plunge as we sailed over it. And then something took the hook with a powerful jerk. Up went the boat into the wind, and after a hard struggle a fine eight-pound bluefish came flouncing over the quarter. No sooner was the hook overboard again than another grabbed it, but it tore off, and the school was gone. This is one of the important uses of the sea-birds. The mackerel fleet, for instance, is badly handicapped without the birds to indicate where the fish are. The wholesale destruction of these birds for millinery purposes is absolutely criminal, as it is for any gunner to shoot them in wanton "sport." Indeed, there is no skill or sport in it, nothing but contemptible butchery and mean selfishness. Live and let live!

With a moderate supply of liver-bait we now ran offshore to the southeast, leaving Pollock Rip light-ship dimly showing up away to the southward. How strange it is, every time I get off here is different from any other in my experience with birds! Oh, the Mother Carey's Chickens that there were this day! We began to encounter them three miles out, and soon, by dropping bits of liver, we had a fine company of

them following us up astern, and then flitting and twittering around the vessel. As far as I could tell, they were all the antarctic Wilson's Petrels — with yellow webs instead of black, and tails rounded instead of forked. What restless, stirring bits of animation they are! They are seldom seen to alight on the water, save for an instant. Toss out a bit of liver just astern and a petrel flutters down and seizes it, without alighting. It keeps fluttering its wings and pattering its feet on the surface, seeming to walk on the water, like Peter of old, hence its name. They are hard indeed to photograph, so constant is their activity and so rapid the beating of their wings. I was snapping away plates at them with my reflex camera and found that an exposure of one one-thousandth of a second was none too quick. With one five-hundredth, at close range, the wings would blur.

WILSON'S PETRELS

The farther off we sailed, the more birds appeared. Now and then a Parasitic Jaeger followed us up, and finally a large Pomarine Jaeger, tempted by the bribes of rich, fat liver we were offering, flew up several times close astern and gave me some fine chances with the camera. A few shearwaters, too, began to show themselves, and by the time we had reached the "Crab Ledge," some eight miles out, we decided to "lie to" again and feed the birds. "Chickens" were as plenty as ever, and came again for rations. A couple of jaegers took the leavings, as they drifted off a little way from the



"A SOOTY SHEARWATER OR TWO JOINED THE PARTY"

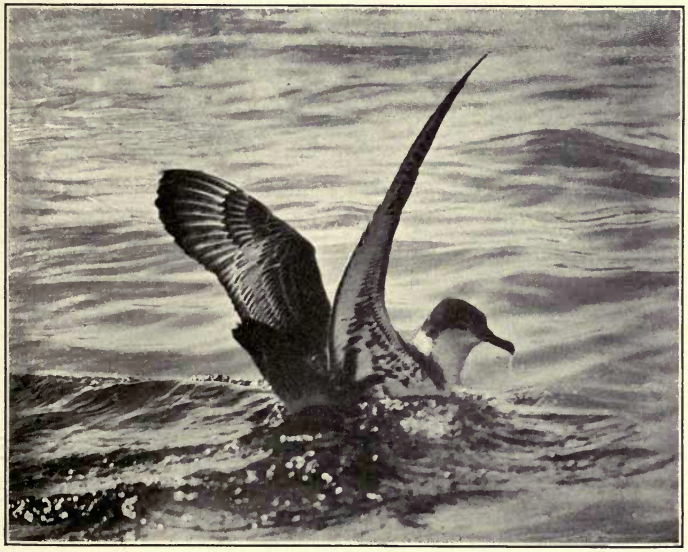
vessel, and perhaps a dozen Greater Shearwaters and a Sooty Shearwater or two joined the party. The fishermen call the latter class "Haglets," — White and Black, respectively, — while the jaegers are "Jiddies."

The haglets did not seem as tame as years ago, when I used almost to feed them out of my hands. Perhaps the trouble was we did not have enough livers to throw out much at a time and get them so excited that they would bait up well. However, they came fairly near, — within ten feet, — and I took a lot of pictures of them, in all sorts of positions and combinations. When all the plates in the holders had been exposed, I darkened the cuddy and managed to change plates without disaster and get to work again.

At length it was time to go back, especially as the wind had become light and was dying out. For a time it was flat

calm, and we got out the long oars. As we rowed, I kept dropping out liver, and at length we waited, as a number of haglets, not inclined to fly without wind, alighted to eat the liver and swam after us. The skipper had managed to catch a few haddock and a single cod while I had been photographing, and we dealt out frugally the scant supply of liver. But we had not enough to draw them very close, and presently it was all gone, so the birds left us and we rowed on. In time a light breeze started up, ruffling the glassy ocean and filling the sail.

A little farther inshore we noticed a flock of both kinds of haglets darting eagerly about on the water. Changing our course, we ran close by them and saw that it was a school of bait they were chasing. In passing I secured a fine picture of the whole scene in action. This time our drail was



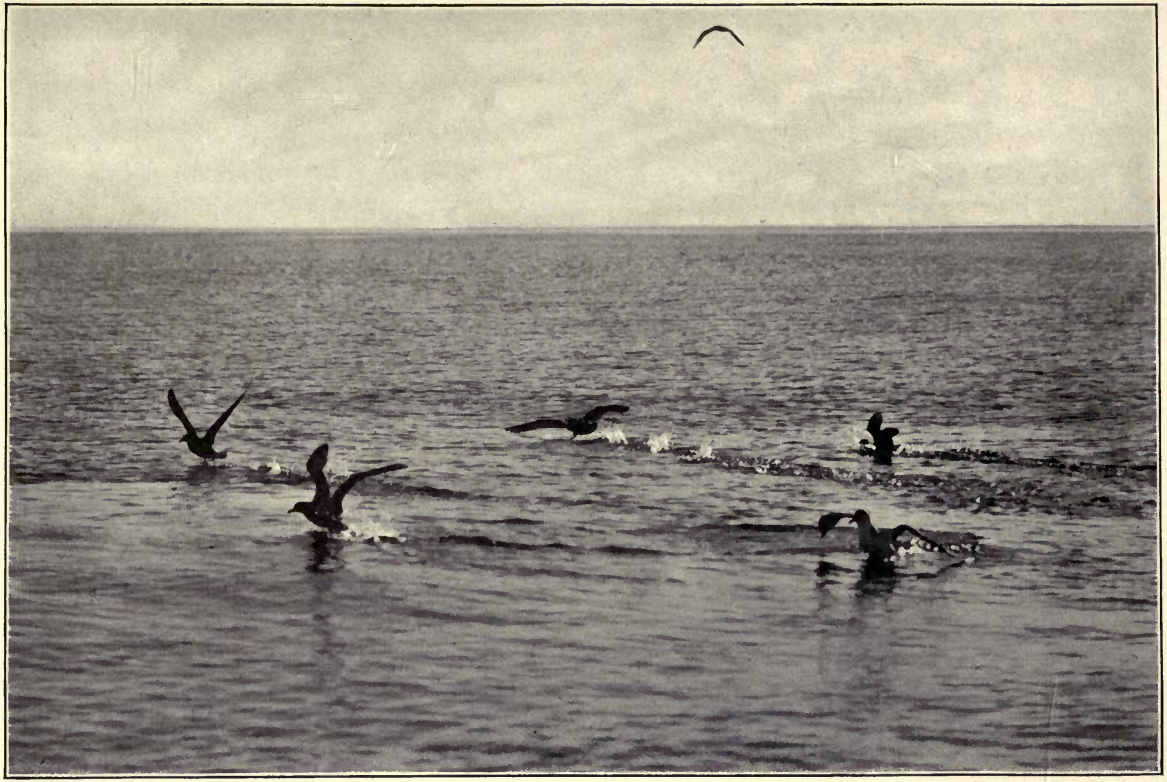
GREATER SHEARWATER. "THEY CAME FAIRLY NEAR"

not ready for the bluefish, but the birds had done their part.

It was my purpose to spend another day off Pollock Rip and enjoy possible new developments. Next day the wind blew a gale offshore, and evidently it blew all the birds away out to sea, for on the day following, when I tried it again, first catching a liberal supply of dog-fish outside the bar, there was hardly a bird to be found, despite a long sail, and far offshore at that. It was necessary, then, to return home, so I had to content myself with what I had already secured.

The next year, in August, I tried it again. This time something remarkable happened. I got offshore the first day, without any delay. Even thus I had to have a little fuss and fret. I arrived at Chatham late in the preceding afternoon, with favorable weather. Then the wind had to haul to the eastward, and blow hard in the night. The old bars began to moan, and in the morning we could see a line of breakers across the entrance. "Too rough," announced the skipper. Yet he thought we might be able to get out when the tide turned in. So we ran down about ten o'clock, the party including two friends, a gentleman and his wife, both ardent bird-lovers. They confessed to being wretched sailors, but they were so eager to see those ocean-birds I had written about that they were willing to take the necessary punishment.

While we were still inside the point of the "north beach," before we took the swell, we saw many gulls and terns of various species, and were having such a good time that the lady remarked very naïvely that she might make a sailor after all, which completely upset the gravity of the skipper. Alas, as we rounded the point and shoal and plunged into the swell, our "lands-people" were soon prostrated, though they remained courageous. Up in the harbor the wind was



GREATER AND SOOTY SHEARWATERS. "IT WAS A SCHOOL OF BAIT THEY WERE CHASING"

POMARINE JAEGER. "GREAT POWERFUL JAEGERS WERE PASSING"

strong and we had taken a double reef before starting. There was also wind enough outside, we could see, but right here was a slack place, and we could not stem the strong incoming tide. So we had to anchor and shake out the reef. Then came some breaker-dodging tactics, but we got outside the bar by noon and stood off to the southward, toward the Pollock Rip light-ship, which we could dimly see, and then offshore.

It proved to be the most wonderful day for jaegers in all my experience in these waters, with one possible exception. Within a mile of the bars we began to see them, and several miles out they were flying about in large numbers, in all sorts of plumage, and some shearwaters as well, with a few of the rare Cory's Shearwater, which I had not seen for years.

I wish I could have a painting of that scene. The sky was

GREATER SHEARWATER RISING

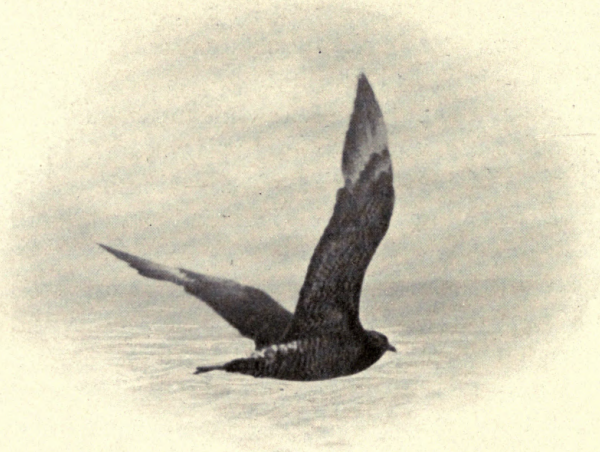
clear, the breeze good, and the boat tossing actively on a rolling, dancing sea. Two suffering people lay quietly, one on each side of the standing-room. The skipper had a line overboard trying for cod, and, at my dictation, was throwing out fragments of liver now and then, to keep the birds baited up. There was the greatest imaginable flapping of wings going on all around us. Scores of great powerful jaegers were passing and repassing close about, and dashing down into the water to secure pieces of liver. Several at once would try for a piece, and the quickest would get it. There were shearwaters, or haglets, too, though not nearly so many. With great rapidity they would go winnowing along, faster than the jaegers, and plunge violently into the water, seize a piece of liver with a most comical expression of greedy satisfaction, and hurry off, as they gulped it down, for fear that a jaeger would get it away from them. Once in flight they did not fear the jaegers, so swift are they on their narrow,

pointed wings. The wailing that was going on made me think of the slaughter of a battle, only that I knew the wails were not of anguish but of satisfaction, eagerness, jealousy. The jaeger's wail was in a high-pitched key, somewhat strident; that of the shearwater was mellower and lower in the scale.

As for me, I was just in my element, fairly wild with delight, feeling like an admiral on his quarter-deck when victory is surely his own. As fast as I could, I loaded the reflex camera, selected a single bird nearest me, in flight or in the act of alighting, or else some pretty combination of birds, and fired away. It was a perfect fusillade, yet each exposure was made with thought and care, though each followed the other with considerable rapidity. Meanwhile my friends had pluckily aroused themselves to see the great sight, and I pointed out to them the different sorts of birds — six kinds in all, there were. The doctor had with him a small camera, and he took a few snap-shots.

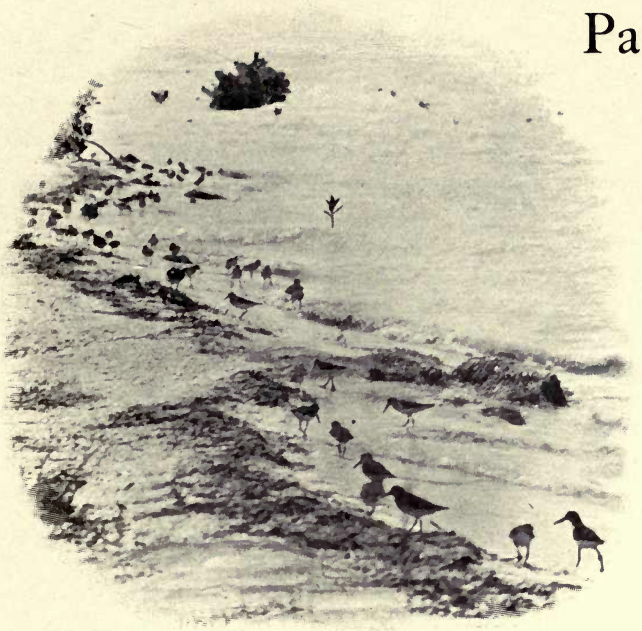
For over an hour my battery was in constant action. Then the plates were used up, so I darkened the cuddy, and crawled into it to change plates. This took some time, and when I emerged a big cloudbank was making up from the west. Just as it began to cover the sun, something went wrong with the focal-plane shutter, — a chip got into it, I found out that evening, — and it would not work. It was time, anyhow, to stop and get in before the tide turned, so I quit work. It was singular that all day I saw but two Wilson's Petrels. Yet it was far more of an achievement to have photographed the jaegers, which I have never found as tame as, for some reason, they were this day. Unfortunately a good many of the pictures proved worthless on account of the ground-glass having been reset a trifle out of register. A few good ones, however, repaid me for the trip.

No sooner did we enter the harbor again than the sick ones revived, and soon were restored to health and the enthusiasm of living, glad that they had endured the ordeal and seen the "ocean wanderers." Yet we were all agreed that about once a year was often enough for a land-lubber to be subjected to so severe a punishment, even to see rare birds.



POMARINE JAEGER

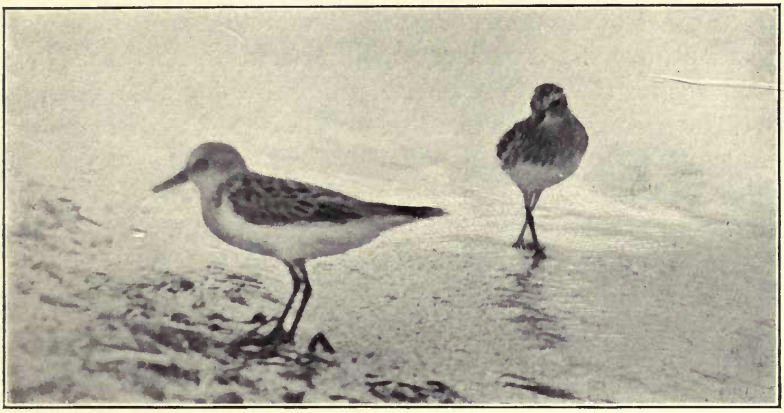
Part IV



The Elusive Shore-Birds

Birds of passage sailed through the leaden air, from the ice-bound,
Desolate northern bays to the shores of tropical islands.

LONGFELLOW.



SEMIPALMATED SANDPIPERS

CHAPTER XII

THE SHORE PATROL

There is a Power whose care
Teaches thy way along that pathless coast.

BRYANT.

AT certain seasons of the year our shores bordering on ocean and great lake are carefully patrolled by the crews of the Government Life-saving Service. And there are seasons, too, when a feathered host is on patrol, suffering few castaways — of a certain class — to be long neglected. Science has a concise and suggestive name for them, — Limicolæ, dwellers by the shore. It is a varied and numerous company, represented by forty species in eastern North America. Though one of these, the Woodcock, prefers the swampy thickets, and his cousin, Wilson's Snipe, the

thick grass of the meadows, and certain others are partial to marshes, dry pasture, or prairie, the decided preference of the Order is for the margin where land and water meet, whether it be by ocean, river, lake, or pool. They are waders by nature and generally by practice, and there is not one but what at times dabbles in margins, that, unlike some margins in human affairs, provide an unfailing sustenance, with their abounding forms of small animal life.

Many a sojourn by the sea has been brightened for me by the presence of the shore-birds. They are nature's contribution toward filling a vacuum. Every other sort of locality — forest, pasture, prairie, mountain, swamp, and ocean — has its peculiar birds, and so has, therefore, the shore. I love to sit on the beach and see a flock of sandpipers racing nimbly after the retreating wave, and back again when it returns, pattering along the strand and picking up the tiny bits of food, invisible to coarse human sight. They are not ordinarily very shy, and, by hiding a little, or sitting quite still, I have often watched their pretty motions from within a few feet. Then, perhaps, they see that they are observed, and off they go with quick, darting flight and mellow twitterings, to take a circuit out over the water, and return to alight a few hundred feet farther along. Though small, they are strong of flight, and that they seek out the distant, mysterious North for their nesting adds to their charm.

A few species spend their summers with us and raise their young, but, possessing vigorous powers of flight, and sought after by man for food, most of them wing their way to the shores of the Arctic Ocean, passing hurriedly by us in the spring, and returning more leisurely in the fall. On the Atlantic coast north of Virginia comparatively few are now found in the spring flight, during May; the great majority pass us out to sea or go up through the interior, notably

along the Mississippi Valley and the Great Plains, returning from July to October by the Atlantic coast route in large numbers, though many, even then, take the inland route.

It is June before the last migrant waders have passed the New England shores, and by early July they begin to straggle back again, so that the stay of some of them in the North is but short. Among the first to return are the little sandpipers known as "Peep" or "Ox-eyes," — the Least and Semipalmated Sandpipers. The little Ring-necked Plovers and the Lesser (or "Summer") Yellow-legs soon follow. The bare flats again begin to be dotted with nimble little forms, and the shrill, piping whistle of the Yellow-legs on the marshes is a characteristic sound. The Sanderling — our only sandpiper that, plover-like, has not even a rudimentary hind toe — soon becomes common on the flats and beaches, and presently small parties of the Knot (or Gray-back), Dowitcher (or Red-breasted Snipe), and Black-bellied Plover (or "Beetle-head") appear. The Spotted Sandpipers, notable for their habit of teetering the body, the commonest shore-bird breeding in New England, now gather on the shores of the bays or on stony beaches, where the gay-colored Turnstone, singly, or in small parties, begins to be seen. By August a few Willets may be found on the beaches and sand-flats, and the Upland Plovers or Bartramian Sandpipers frequent certain hilly pastures not far from salt water. By this time, scattering Bonaparte's (or White-rumped) Sandpipers have joined the flocks of small waders, flocks of Pectoral Sandpipers (or "Grass-birds") and Greater (or "Winter") Yellow-legs appear on the marshes, and the pretty little sand-colored Piping Plover, which has remained to breed, gains its greatest abundance through accessions of young birds, and some that have been farther north. A few Hudsonian (or "Jack") Curlew, wary fellows, with long, decurved bills, roam about behind the beaches.

The Solitary Sandpiper is seen on the margins mostly of woodland ponds and bogs.

I may be mistaken, but it has usually seemed to me that from about the twentieth of August to the first part of September there is a decided diminution in the numbers of many of the shore-birds. It is largely the adults that have been present hitherto. These pass on, and there is a gap between this and the arrival of the young, which in a number of species can be distinguished by a paler cast of plumage. The young Ring-necks and Knots begin to appear by the last of August; young Black-bellied Plovers are not much in evidence before the tenth of September, and the young of the Golden Plovers, if they come at all, are often even later. During the latter half of September and well into October there are considerable flights of Winter Yellow-legs. At this time, too, the Red-backed Sandpipers flock along the beaches, a tardy tribe that the summer boarder knows nothing of. Wilson's Snipe abounds on the meadows and provides sport for the hunters. The hardiest of all the host are the Purple Sandpipers, the only waders that habitually spend their winters in the North. They can rarely bear the tropical heat of a Boston winter, and Cape Ann is about as far south as they commonly venture. They are abundant, for instance, on Matinicus Island, Maine, all winter, feeding among the rocks, and are called "Rock Snipe."

There can be little doubt that, owing to the tremendous persecution of the shore-birds in their southward flight along the coast-line of New England and the Middle States, increasing numbers of various species are learning to avoid this dangerous zone and to pass us far out to sea, flying in the spring from the capes of North Carolina or Virginia direct to the Maritime Provinces, and in the autumn flight straight back from Nova Scotia. Indeed, this has always been the

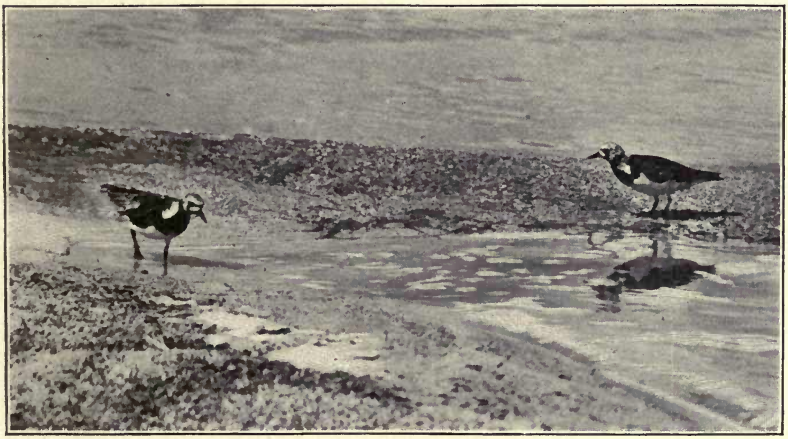
habit of certain species — naturally enough the Phalaropes, and notably the Golden Plover and the Eskimo Curlew. One of the most fascinating possibilities of the fall flight time — late in August and during September — is that a violent easterly gale may occur and deflect to our shores great numbers of these fine birds, which are of particular interest because of the halo of mystery and romance — we may say — which surrounds them. These exciting occasions, alas, are becoming more and more rare, yet I keenly enjoy the remembrance of some of them, especially of one which I shall now describe.

The twenty-ninth of August, 1883, according to my journal, was the date of the first autumnal hurricane. For nearly two months I had been camping, with friends, at Chatham, Massachusetts, studying the birds of sea and shore. Our tent was pitched on a grassy slope, a few rods up from the bay. During the previous afternoon the wind had freshened from the northeast, and masses of stratus cloud and fog, rolling in from the sea, began to underlie the high cirrus streamers from a contrary direction. At bedtime, making everything fast, we sought our blankets. But at midnight there came to our ears a cry. It was the roar of the storm which threatened our frail shelter, while the sea had risen to our very door. After a disturbed, uncomfortable night, the day broke gray and wet. Looking out, we saw the waters, even of the bay, a mass of raging foam. The rain was driving almost parallel with the ground, while ever and anon came a terrific blast that would almost carry one away with the helpless raindrops flying before it. Out on the open sea great waves followed one after another in quick succession, and thundered in on the beach, bringing, it seemed, the ocean bottom along with them, for, as far out as one could see, the ocean was mingled with sand and masses of weed, trophies of the violence of the storm.

What was that great cloud of birds high in the air, apparently three or four hundred in number, driving in from the sea with the gale? I realized I was witnessing what I had longed to see, a flight of the Golden Plover and Eskimo Curlew, birds which in a certain way are to be associated in a class by themselves. In a moment, as I stood there, I saw another flock, and others, some smaller, but all of good size. There was no especial order in their ranks; it was no time to think of such matters. The gale had reduced them to huddling, driven masses.

I have not space to detail the events of the day. For hours, these and other shore-bird flocks passed in from the sea over the end of the Cape. Most of them were high in air, but some came in low over the outer beach, and were decimated by the gunners. All that morning noble flocks of Golden Plover and Eskimo Curlew were stringing over the pasture grounds and barren hill-tops, where the gunners lay in wait for them and shot them down. By noon the storm began to abate slightly, and the flight slackened. Early the next morning, though the wind was still in the east, there was hardly a wader of any kind to be found. Every year since then, these fine birds have become scarcer on New England shores, and such a flight may never be seen again. There is a peculiar romantic interest which attaches to these flights. After nesting in the arctic regions, these plover and curlew proceed in August to Labrador. Thence they pass to Nova Scotia, and then south over the ocean, resting occasionally on its surface, but avoiding the dangerous shores of the United States. Crossing the West Indies, they are said to land on the shores of Brazil, and thence pass down to Argentina, and even Patagonia. If a gale blows them off this course, and compels them to touch on our much-hunted shores, they leave them at the earliest possible moment. In the spring they return to

the far North through the interior of the United States. The first flight off New England seems to occur about the last ten days of August, and is only of adult birds. The young do not reach us till about the middle of September. The young Golden Plovers used to frequent, in late September, the "Back-Bay marshes" of Boston, which I then considered a splendid plover ground; but this is a thing of the past.



TURNSTONES. "THE BIRDS FED UP NEAR TO ME"

The desire to see more of the shore-birds, rapidly becoming scarce on the New England coast, started me off, a few seasons ago, about the middle of August, along the eastern coast of Nova Scotia. I kept travelling until I found an ideal spot, — fine lonely sand-beaches pounded by the surf, extensive salt marshes back of them, and an inlet whose sand-flats furnished unsurpassed feeding-ground for hosts of shore-birds. The very first birds I saw were four Hudsonian Curlews walking about in their sedate fashion in the dry sand and grass above the beach on which were sporting flocks of smaller shore-birds. I had seen enough to convince

me, and forthwith I engaged board with a fisherman's family who lived close by.

All my favorable impressions were fully confirmed during the two weeks of my stay. The beaches and flats abounded in life. Sanderlings, Ring-necks, Least and Semipalmated Sandpipers — in large flocks or scattering — were everywhere, with numbers of Piping Plovers, and occasionally Gray-backs and Dowitchers feeding among them. On the stony beaches, especially where seaweed had accumulated, were good flocks of Turnstones and numbers of Spotted Sandpipers. Great flocks of hundreds of all these species intermingled fed along the outer beach. Out on the flats of the inlet were many adult Black-bellied Plovers, which gathered in an immense flock, at high tide, upon certain dry sand-bars and thwarted all attempts to approach them. On these flats and on the marshes both kinds of Yellow-legs were found, and their shrill, "tell-tale" whistle was always resounding. The marshes attracted quite a few Pectoral Sandpipers, and, in the early morning, bunches of Phalaropes which had come in from the open sea. There were, too, from time to time, a few Hudsonian Curlews upon the marshes and dunes and also back in the cranberry-bogs.

There was no flight, as yet, of the Golden Plover or Eskimo Curlew. I had to leave on September first, and, rather curiously, returned there on that exact date the year following, as though to begin where I left off. Conditions were about as before, save that the weather had turned cool and many of the smaller waders had left, while the young birds were just beginning to arrive. About the twenty-fifth of August the fishermen had noticed a few flocks of Eskimo Curlew and Golden Plover, but there were none about now. On September tenth I saw a single Golden Plover, which a boy had shot as it fed with some "Ox-eyes." On the thirteenth

the wind was fresh from the northeast and the Golden Plovers arrived in good numbers, and were common during the remaining week of my stay. At first all were adults, with dark breasts, but on the fifteenth and afterwards there were more and more of the pale-bellied young. They fed preferably on the marshes or on any grass-land near the sea, but also were often seen along the edge of the inlet, wading along its sandy margins.

Somehow, the Golden Plover appeals to me as the finest of the shore-birds. It has a good name, it is a beautiful bird, and is all the more attractive for the romantic interest attaching to its wonderful migration and its fortuitous appearances on our shores. No bird has more splendid powers of flight. How I love to watch the varied evolutions of its swift squadrons, now high in air, now low over the flats, wheeling to the stirring, wild music of mellow, whistled calls! Then they suddenly alight in the short grass, where they scatter out in pursuit of grasshoppers or other insect prey, not forgetting their true plover dignity as they walk sedately about or stand erect, like Robins listening for the worm.

On the eighteenth the first of the tardy host of Red-backed Sandpipers — sometimes called "Frost-birds" — arrived, and previously, on the fifth and sixth, I made my first acquaintance with the Buff-breasted Sandpiper, — a flock of a dozen flying along the beach and a single one feeding on the inlet flats.

Birds were now pouring in, — scoters and other sea-ducks had begun to fly, jaegers were out at sea in swarms, hawks of various sorts were migrating, with many Northern land-birds among the spruces, — and it seemed hard to pack my belongings and start off, amid the first early snow-squall, for tame and effete civilization!

On Sunday evening, the night before I left, I strolled down

the beach alone, for a parting look. The full moon had just risen from the ocean, flooding sea and beach with its silvery splendor. The exquisite scene made a profound impression on me, which was heightened by the presence of two little Sanderlings, feeding by moonlight. I sat down and watched them. The sparkling, phosphorescent wave would ripple up around their little feet, and they would run before it, and then race back again, as it retreated. They were so busy, so happy, and twittered one to the other, saying, in spirit,

"One little sandpiper and I,"

while I felt it too. At length they darted off up the shore, but I still lingered to enjoy the moon, wave, and ocean, worshipping, I felt, in the beauty of holiness, until passing time compelled me to seek the fisher's cottage.

There is a peculiar fascination for me in the spring migration of the Limicolæ, for then the birds are decked in their beautiful vernal dress. Instead of a pale, bleached-out plumage, the fashion is one of rich browns, reds, and black, with deep-tinted, striking breast-colors and markings. There is no finer place to observe this than the broad prairies of the West. There one will meet a number of the larger kinds in abundance, which he would look for in vain on the Atlantic coast. How the picture rises before my mind of the broncos jogging over a fire-swept prairie, about the middle of May, and the discovery of a flock of twenty Golden Plover but a few rods off, blending perfectly in color with the blackened ground, as they faced us with coal-black breasts. We stopped the horses to watch, yet they did not fly, as we feared they would, but resumed their feeding. They pattered about, making their graceful plover-bows as they stooped quickly for their insect-prey, showing us the golden-yellow spangles on their backs, and the clear white wreath of distinction

around the sides of the head. They were taking needed rest and refreshment on their long journey from Patagonia to the Arctic Sea, and we left them with sincere wishes for their prosperity. Thus I encountered many a flock, and even found a band of them wading in a shallow alkaline lake.

FLOCK OF TURNSTONES, WITH A WILSON'S PLOVER, A DOWITCHER, AND A SANDPIPER

Near here the next morning, on a muddy flat bordering a small slough, I had my introduction to a kind of wader that I had long desired to meet. I saw them, a band of a dozen, long of leg and bill, scattered about, eagerly probing in the rich Dakota mud. They had reddish breasts and white rumps, and I knew they were the Hudsonian Godwit, a bird I had never seen alive. They remained there all day, giving me abundant opportunity to watch their graceful motions, — walking, probing, and wading, — which resembled those of the Yellow-legs. This species, too, breeds in the far North.

Other migratory species were also passing, lingering awhile along the margins of the lakes or the muddy shores of the sloughs. Many Turnstones, in their most brilliant plumage, were enjoying the pebbly shores of the larger lakes. In one

shallow, muddy slough, on Memorial Day, I saw a typical and beautiful sight. The soft, muddy shores and the shallow water were dotted all over with shore-birds wading about and having a most happy time. Largest and most conspicuous, save for two or three Willets, were a number of fine Black-bellied and Golden Plovers in splendid plumage. Near them were Dowitchers, with their ruddy under parts of the spring dress, and some Yellow-legs, as well as a varied proletariat of the smaller species, — White-rumped, Semipalmated, and Least Sandpipers, Ring-necks, and a few Solitary Tatlers and Killdeers. It was a glorious day, spicy with the crisp ozone of the prairies. How could I but be exhilarated! Along with the migrants one also continually sees the limicoline species that remain to breed, — Upland Plovers, Killdeers, Willets, Great Marbled Godwits, Wilson's Phalaropes, Piping Plovers, and Avocets, the aggregate of which would make well worth while a spring trip to the prairies of the West, even if the only bird-life were that of the shore-birds.

In these degenerate days of waning numbers of shore-birds in our Northern Atlantic States, it will greatly revive the bird-lover's drooping spirits and stimulate his faith that it is not yet too late to save the shore-birds, to take a trip along the coasts of our Southern States in beautiful May. It is pretty hot then, but never mind, it will pay to go. Aside from the breeding shore-birds, the abundance of the migrants is a revelation. I was charmed with the gentle Red-backed Sandpipers, in their beautiful spring plumage, with the black abdomen, so different from our "Lead-back" of the late fall. They were so tame I was sometimes able to creep up near enough to them, on the open flats and shores, to secure quite satisfactory pictures with the reflex camera. Then there were the Dowitchers, Knots, and Turnstones in their gay habiliments, with the Black-bellied and

TURNSTONES AND SANDPIPERS. "WITHIN A DOZEN FEET THEY FED, BATHED, AND PREENED THEIR FEATHERS"

HUDSONIAN CURLEWS COMING IN AT NIGHT TO ROOST

Ring-necked Plovers, Yellow-legs, and the host of little "Ox-eyes."

But what impressed me most was the astonishing migration of the Hudsonian Curlews. Having never seen more than a few scattered ones at any one time, I had imagined that the species was everywhere scarce. But here they were by scores of thousands. During the day they were widely scattered over immense marshes. Learning from others of the best places to observe them, I spent a night at each of several little low islands — mere sand-bars — lying off the coast.

About half-past five or six o'clock, when the sun was low in the horizon or had set behind a cloud-bank, the first advancing line is seen, and a string of from a dozen to fifty Hudsonian Curlews come scaling over the beach, to alight on the bar, down at the other end. After a few minutes another flock is seen approaching. By half-past six they are arriving fast, and by seven there are two or three flocks in sight all the

time, some of them containing as many as seventy-five birds. Meantime I am shooting at them as they pass, with my reflex camera, despite the dull light. As may be imagined, the company on the sand has become immense, covering many acres. They keep up a sort of murmuring noise, and now and then all fly up, with a perfect storm and tumult of wings and voices, soon to alight again. Even after dark they are yet arriving, as one may hear. I hazard the guess that there are often ten thousand curlews at such a roost each night. At the first glimmer of day they are off again for the marshes. It is very important that every Southern State should prohibit the spring shooting of shore-birds. Unless they do so, in a few years these species will surely be exterminated, at the recent, and even present, rate of wholesale slaughter. It is simply wicked, as well as short-sighted, to kill them at this time, when they are about to breed.

Despite all the camera-hunting of the day, it is notable that there have been almost no shore-bird photographs in existence. The reason is that the task is almost prohibitive. Shore-birds are timid, quick in their motions; they live in the open, and are so small — most of them — that, unless one can get very near indeed, the picture will amount to but little. I have spent whole days in blinds with decoys, or with the camera focused on the water's edge, vainly waiting for a single one of the provoking birds to come within proper range. Occasionally I have thus secured a single picture. Little by little, in the course of years, through taking advantage of every opportunity, my series of shore-bird pictures has been slowly growing, and once I improved the chance of a lifetime.

It was in my cruise among the Florida Keys when I left the party who were to return in the schooner to Miami, and Warden Bradley and I started on the fifty-mile beat to windward in a centre-board skiff back to our headquarters. The

westerly wind kept increasing, and by eleven o'clock the situation was alarming. The waves were making a clean breach over us. My precious box of photographic plates was in the middle of the boat, propped up on a kettle and a coffee-pot to keep them out of the swashing water, and covered with a rubber cloth above. Finally, up spake Bradley: "Mr. Job, I don't want to take the responsibility for your life; suppose we run back and anchor behind those keys till we have better weather." But time was very valuable, and I urged him to take the chances, so we kept on, and, after a hard fight, by early afternoon reached the next keys to windward, — two small mangrove islets, one of them with a narrow sand-beach around it, close up to the thicket, with small sand-bars at one end just across a narrow channel that closely approached the shore. As we sailed near, I saw that these sands were fairly alive with shore-birds, feeding and taking refuge from the gale.

Immediately I recognized this as a great opportunity, and, landing upon the key, despite the swarms of mosquitoes, I went to work. Up at the farther end were the most birds, and, creeping up, I peered through the bushes. Within from ten to twenty feet of me were a sprinkling of minor waders, a fine flock of some twenty Black-bellied Plovers, and a few Laughing Gulls. I wish I could have photographed the gulls, yet I am sorry they were there, for while I was trying to clear a "window" through the mangrove shrubbery out of which to aim the camera, they saw me and set up such a screaming, as they departed, that they took with them all the other birds.

However, standing knee-deep in the water, I finished my work and set up the camera on the tripod, and focused on the sand-bar. No sooner had I done this than many of the birds began to come back, — various sandpipers, Dowitchers,

Wilson's Plovers, and soon a large flock of Turnstones. Silently and swiftly I photographed them until my plates were exhausted, when I returned to the boat for more, and then went at it again. Not a bird saw me. Within a dozen feet they fed, bathed, preened their feathers, and rested, with no shadow of suspicion disturbing their peace of mind.

"A SPLENDID MALE BLACK-BREAST PLOVER." "TIRED OF FEEDING"

Then I left them and went out to an open beach with the reflex camera. A large flock of small sandpipers and some Turnstones, with a few Ring-necked and Wilson's Plovers, were busily feeding. Upon hands and knees I crawled out to an isolated mangrove bush, close to the water's edge. The birds fed up near to me, as I squatted there, without seeming to distinguish me from the bush. Some of them, one or two

at a time, would even run past me within about five feet, without being alarmed. With my single lens, an inch-wide aperture of the curtain and not very rapid speed, I exposed plate after plate, and not long before sundown had used up my last one.

We then crossed to the other key, only a few rods off, and

"GONE SWEETLY OFF INTO DREAMLAND"

"camped." That is, we started a fire, got supper, and hung our mosquito net among the trees. After dark I changed plates, and early in the morning went to work again. There was nothing new, save for the presence of a splendid male Black-breast Plover and two Least Terns bathing in a pool. I had to choose between these subjects for the first shot. I chose the plover, as the shyest of the shore-birds. The terns

soon flew away, but I did not regret the decision. In various interesting and characteristic poses, I secured a dozen pictures of the plover, ending up with a couple when he had tired of feeding, had drawn up one leg, put his bill under his wing-coverts, and gone sweetly off into dreamland. This was glory enough for one day, so, as the wind had moderated somewhat, we started again on our beat for Cape Sable. Some naturalists who afterwards saw this picture were much amused to think that an old Black-bellied Plover — of all birds — should allow a man to crawl up within ten feet and photograph him, and asleep at that!

LESSER YELLOW-LEGS IN FLORIDA POOL

ANXIOUS RING-NECKED PLOVERS. "WHEN THEY CAME TOGETHER"

CHAPTER XIII

NORTHWARD WITH THE SHORE-BIRD HOST

No mortal saw it go;—
But who doth hear
Its summer cheer
As it flitteth to and fro?

HOWITT.

SWIFT and tireless of flight, late in May the hordes of migrant shore-birds are gone as suddenly as they appeared. No one sees them go; probably the start is in the evening. But by the time we miss them they may be a thousand miles farther to the north,—that is, when they have really decided to be on the move. Previously they may have fed leisurely along from beach to beach and marsh to marsh, recuperating from their long flight across southern seas. But now the vernal influence sounds the clarion call, and they forthwith strike the real limicoline pace.

Where do they go? Less is known about the breeding

haunts and habits of this mysterious tribe than of any order in the system of ornithology. While a very few of the species linger on our Southern coasts, the great mass of them push on for the far North. Nor do the bulk of them stop till they are where the curiosity of man can seldom disturb their privacy. The eggs and nesting habits of a number of these species are hardly known to science. Their summer home is the barren grounds along the arctic sea. In the damp moss near some pool, upon the cold ground, still frozen underneath, in the early part of June they scratch a slight hollow, build a rude, frail nest of grass, and lay four eggs, pyriform, or pear-shaped, drab-colored, and heavily blotched with black or brown.

Somehow, the mystery and romance surrounding the lives of these dabblers in margins make strong appeal to me. From the time when in boyhood I first heard the clear whistle of the Yellow-legs over the salt marshes and the long-drawn, plaintive notes of the plovers on the bay flats, or saw the nimble band of sandpipers upon the ocean front chased by the surf, I have longed to know more of them all. And, though I have not yet roamed quite within the arctic circle, latterly I have been far enough north to find at least stragglers from the main body settled down to breed under essentially arctic conditions, and to secure some photographs of these birds from life, which are probably the first of such ever made.

Never shall I forget the thrill of my first experience with these Northerners in their summer homes. It was on the Magdalen Islands, in the stormy Gulf of St. Lawrence, well up toward southern Labrador. The day was the thirteenth of June, clear and cold, the air of the early morning having almost the sting of the frost. With a companion and a guide I was exploring the extensive marshy barrens of the East Point

ponds which Audubon, some seventy years ago, vainly tried to reach. On this my first day upon these Northern islands it was delightful that I should be privileged to hear for my first time the melodious love-songs of those Northern shore-birds, the Wilson's Snipe and the Least Sandpiper. Of the former I shall tell presently. In the vicinity of a small pond the little sandpiper was flying about in circles, now low, now high enough to be almost lost to sight. The wings were beating tremulously under the impulses of love, and the little fellow was uttering a continuous mellow twittering, very pretty to hear. Many other shore-birds have this habit; it may be characteristic of them all. The love-song of the Woodcock is an example, and is comparatively well known.

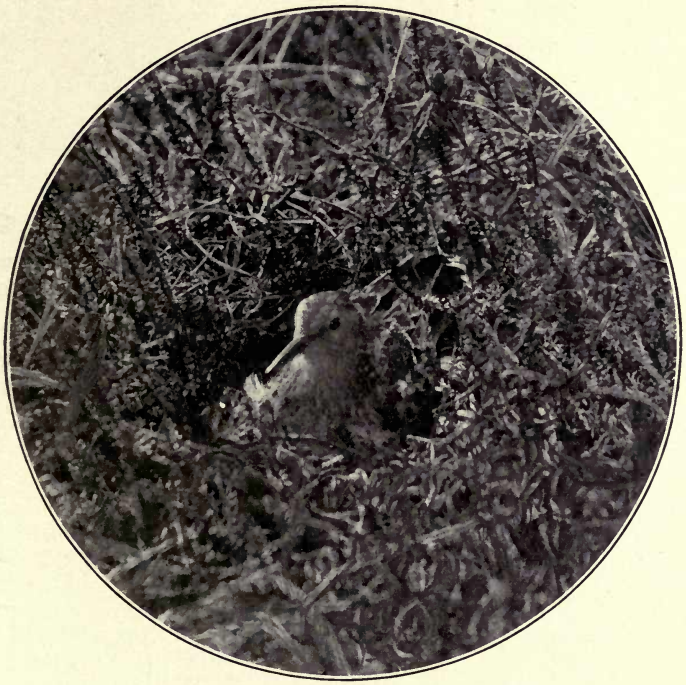
Separating now from my companions, I had almost exceeded the limits of my boot-tops in reaching the nests of some Rusty Grackles (a northerly species) in a strip of low spruces, when I heard a faint halloo, and saw my companion in the distance eagerly beckoning. When I reached him he said nothing, but pointed down near his feet. He was standing just up from a wet depression, in open, barren ground which bore only the coarse, sparse grass and the gray moss of the arctic barrens. Following his direction, I saw a Least Sandpiper trotting nervously about near us. Then, looking closer, I saw the nest. This Sandpiper is the smallest of the "Peeps" or "Ox-eyes," as they are popularly called, which in spring and fall flock upon our beaches and marshes, but breed in the arctic regions. The nest was merely a round hollow scratched out in the moss and lined with a few dry bayberry leaves. The eggs were four, as is usual with shore-birds, and were arranged with the small ends together, which is also good form in shore-bird etiquette. They were of a very dark drab color, heavily blotched with brown. My delight may be imagined, as I stood gazing at an exhibition which but few

NEST AND EGGS OF LEAST SANDPIPER

naturalists have been privileged to see. It was near this spot that we had just heard the love-song. What luck, thus soon, in all this vast waste, to stumble upon its cause! And here, now, were both the owners. The singer had heard the distressed chirping of his mate and had come down to trot about with her, though more careful than she to avoid too close approach to danger. It was the mother who showed herself the really anxious one. At times she would come close up beside us, throw herself prostrate on the moss, limp, flutter, and drag herself as though about to expire — the familiar ruse of shore-birds.

And now, of course, to record by photography some of this rare scene was in order. As luck would have it, — perhaps to even up matters, — this was the only time in my life when

I had lost the tripod screw. Not to be beaten, I cut down with my knife a small spruce, made a stake, and drove it into the ground near the nest. With my tree-apparatus I clamped the camera to the stake and was ready for business, the first part of which was to attempt the picture of the mother-bird on the nest. The camera was properly focused and screened with spruce boughs; then, with a thread in hand, attached at the other end to the shutter, I lay flat on my face, peering over a dune, and waited. Poor little bird, she did not like the look of this blunderbuss with staring eye any more than we should that of a cannon trained upon our front door.



LEAST SANDPIPER ON NEST

Again and again she approached almost to the nest, only to flee in dismay. Finally, becoming bolder, after twenty minutes of this hesitancy, without warning she suddenly fairly "scooted" over the moss and settled down upon her eggs. Snap went the shutter, and her portrait was mine. Instantly

MOTHER LEAST SANDPIPER. "ALIGHTED ON THE POSTS AND WIRE"

she darted off in great fright, too much alarmed to venture again. So I photographed the nest and eggs and withdrew.

Four years later, again in June, I was back at the Magdalens. Daily passing along a road by a fisherman's house revealed nothing notable, until one day, at the very end of our stay, one of our party, passing this spot, was attracted by the actions of a pair of Least Sandpipers. Desperate with anxiety, they fluttered along the road before him and alighted, vociferating, on the posts and wire of the fence. Upon learn-

ing of this, I came at once and found the birds acting as described, and alighting a good deal in the adjoining field of short grass. It was evident that they had young, so two of us made a thorough search for them. At one place the sandpipers were especially solicitous, and here we soon found an egg-shell, and presently the whole brood of four of about the most cunning bird-mites I ever had seen. They were of a mottled rich brown and white, and were squatting close together amid some sparse grass, perfectly motionless, and so blending with their surroundings that we had overlooked them many times. No nest could be found, and yet here were the newly hatched young, too feeble, seemingly, to have travelled but a few steps.

YOUNG LEAST SANDPIPERS AS FIRST FOUND

This was a prize indeed, a splendid complement for my other Least Sandpiper pictures, — for they were of this species. After photographing them, I placed the camera so as to secure a picture of the mother brooding. She would not venture, and the brood was becoming chilled in the raw evening air, so I removed the camera, and in a few seconds they were under mother's wing. Next morning I readily found the brood again in the same field, stronger now, and running about singly. The old ones were as demonstrative as ever, and with my reflex camera, set with the single member of my big double anastigmat, I secured pictures of the female upon stub, fence, and ground, and also of single young. That after-

noon they were gone, and in the evening I saw the old birds a third of a mile away on a salt marsh, whither they had evidently led their brood.

Besides the breeding Horned Grebes, Bitterns, Red-breasted Mergansers, Black Ducks, Blue-bills, and Teal of these interesting East Point ponds, another striking phenomenon is the gyration and "love-song" of the Wilson's Snipe. This is the bird so dear to sportsmen, here breeding quite commonly. We first heard a sweet winnowing or twittering sound somewhere above us, reminding one of the sound of the wings of the Golden-eye Duck, or "Whistler," in flight. Though we strain our eyes in scanning the blue vault, nothing is at first visible. Finally we see what looks like a speck of a bird, so high up is it. The wings move rapidly, and with great velocity it darts about in wide circles, far and wide, high and low. It may at length dash close down over our heads, uttering now a continuous vocal alarm-note, somewhat after the style of the Cooper's Hawk. The first thing we know it will alight pell-mell upon the topmost twig of a spruce, whence it will continue its sharp vociferation, or stand for a while in silence, when it may start off again on another ten-mile flight. When an intruder approaches the nest, both birds will fly about in this erratic manner.

The nest is hard to find, and I have tramped and tramped, searching for it in vain. But this season one of our party undertook to watch a pair of snipe from a hiding-place. In the course of half an hour he saw one of them alight in the grass on the edge of a sort of marshy bayou, back from a large pond. Waiting a few moments, he walked up and soon flushed the bird a few rods from where she had alighted. On damp ground, amid a tract of low bushes and sparse grass, was the long-sought nest, containing four dark-colored, mottled eggs, rounder and less pointed than the eggs

of most other shore-birds, — for the snipe is classed among shore-birds, or Limicolæ. The date was the eighteenth of June.

After duly photographing the nest and eggs, both snipes meanwhile flying excitedly about overhead, I prepared the camera for a possible picture of the mother snipe upon the nest at close range. When all was ready, the camera being set upon the ground only a yard from the nest, I laid the line of connecting thread clear across the bayou, where I hid under some low spruces to watch. One snipe only seemed to be flying about, and there was no way of telling whether the other had returned to the nest but to creep up and look. Before doing this, however, I rejoined the party who were eating lunch up on a sand-dune. After nearly an hour's absence, I crept silently to my spool and pulled at a venture, not knowing whether or not the bird was on the nest. As the sky was somewhat overcast, I had set the shutter for one second, trusting that the snipe might be dozing on the nest and would not move. Then I silently tiptoed over to where I could learn my fate. There was the blessed snipe at her vigil, facing the camera, head low and bill resting on the ground.

She made no move to start till I was within ten feet of her, when she fluttered reluctantly away and dropped down on the bank close at hand, beside a spruce thicket, where she lay flapping her wings much as does a nighthawk under similar circumstances, reiterating the familiar "scaip" note, that every gunner knows. Then for half a minute she lay still, as though dead, but soon stood up, ran a little way, and flew quickly off. So tame was she that she returned to the nest in my very presence, before I was ready for the next shot. Driving her off, I set the shutter again and took my station under a spruce about twenty feet away. In just four minutes I saw her alight near by, and in another minute she

had settled down upon her eggs, this time side to the camera. A steady pull on the string gave me a splendid timed exposure, the bird not moving at the click of the shutter. After being flushed again she would not return for a while, but I finally got two more pictures before a shower started us back for the boat, myself delighted that I had succeeded, probably for the first time in history, in photographing Wilson's Snipe from life. Episodes like this are what, to my mind, make camera-hunting the finest of all sports. There are still many birds and mammals which have never yet been photographed. But even when a species, as such, has been photographed, there is well-nigh as great a field remaining as in human portraiture after the first man had been successfully photographed!

In 1900, during a boating-trip to these islands, I happened upon a locality where, along with Piping Plovers and Spotted Sandpipers, there was quite a colony of Ring-necked Plovers, evidently breeding. These plovers, so common upon our flats and beaches during the migrations, breed, usually, in the arctic regions, but here they were, at the southern limit of their range. Two parallel sand-bars connecting two "islands" here form between them a natural canal or lagoon over a mile in width, with sandy shores, and grassy dunes between these and the outer sea-beaches. The plover-ground was on the eastern shore of this lagoon. Numbers of the pretty plovers kept trotting along the sand in front of us, evidently anxious about their nests or young. These, unfortunately, we were unable to discover, owing to lack of time to prosecute the search. The fact of seeing a young Piping Plover led me to believe that the more northerly species also had young.

Upon my recent return to the Magdalens, I made it a point to devote a whole day to this locality. It was the very same time of year as before, the twentieth of June, clear, and almost

WILSON'S SNIPE ON NEST. "A SPLENDID TIMED EXPOSURE"

freezing cold. A blustering northwest wind lashed the bays into white-caps and made the lobster-boat skim along the wide lagoon like a shearwater. We first landed on the side opposite the plover resort, where was a series of ponds similar to those of East Point, where we hoped to find a variety of shore-birds. Numbers of Least Sandpipers were feeding, singly or in pairs, along the margins of the lakelets, with a few of the Ring-necks. It was so cold that I had fairly to run to get warm, after the cold sail in the boat, as I beat about in hope of flushing a sandpiper, snipe, or wild duck from its nest. One of the company came racing and puffing after me, saying he was having a hard time to catch up. All we found was the nest of a Horned Grebe out in some reeds in quite deep water. It seemed natural on such a cold day to see a flock of Common Crossbills feeding among the spruces.

We ate dinner behind some sand-dunes above the beach, and then squared away for the home of the plovers, some two miles over the sparkling water. As we approached, we were sorry to see several men and boys with pails walking about over the stretch of sand and grass, followed by an angry company of hovering terns. They proved to be French fishermen, gathering eggs for food. The Ring-necked Plovers were here, as before, running anxiously about along the sandy margin, and I feared that we were too late. When the men showed us what they had found, I was glad to see that, besides the terns' eggs, they had taken but one set of four eggs of the Piping Plover.

It occurred to me that these fellows might aid us in our search. They could not speak a word of English, and I imagine that their French dialect was none of the purest. However, we unlimbered our college French as best we could. Each sally brought forth a roar of laughter from the rest of the party, as the air became redolent with phrases

about "les petits œufs." Finally we made the Frenchmen understand that we would give them ten cents for every plover's nest — not Spotted Sandpiper's — they would find us. It did not take long to begin. One of them soon shouted and beckoned. We hurried over, and, sure enough, there was the first nest of the Ring-necked Plover that I had ever seen, with four handsome eggs, more pointed than those of the Piping Plover and much more heavily marked, resembling in that respect terns' eggs. It was just up from the wide sand-flat shore, at the edge of the sparse grass, a mere hollow in the sand with a few straws laid around it. The owners were trotting around on the flat or flying back and forth, uttering their familiar alarm-note. While we were photographing this nest, the Frenchmen found another a little farther back among the dunes, and thus they kept us busy — photographing and handing out dimes. One of our party also discovered a nest of the Red-breasted Merganser, containing six eggs. It was situated in the thick grass of a marshy depression. The bird, in leaving, had drawn the grass skilfully over the eggs.

Meanwhile another friend had found and caught a young Ring-neck, a cunning, little striped thing that could run like a witch. Presently, farther along, I also captured a plover-chick belonging to another pair of the birds. These were so extremely solicitous, as they limped and fluttered about, that I conceived an idea which I at once put into practice. Tethering the youngster to a blade of grass out on the dry, open sand, to keep it from running away, I sat down with my reflex camera not more than two or three paces from the young bird. Then I had some camera-shooting that was worth while. Both the plovers were pattering close around me. When they came together, I would get them both on one plate.

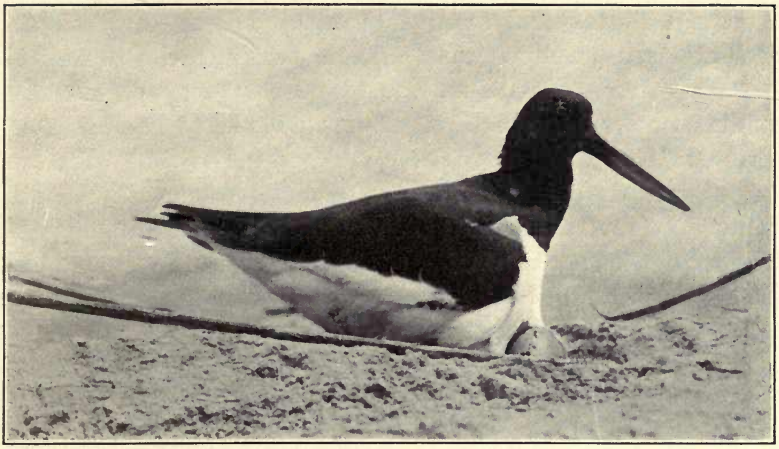
Owing to the wind and cold, the chick needed brooding, and the devoted little mother was not slow to respond. In a few moments, finding that I kept still and did not hurt her, she came up and nestled down on the sand close beside her

RING-NECKED PLOVER AND YOUNG. "THE LITTLE FELLOW SCURRIED IN UNDER THE MATERNAL BREAST"

darling, and the little fellow scurried in under the maternal breast. Now and then she ran off, but soon returned, stood beside the chick, and then cuddled it some more. Meanwhile I was working the camera assiduously, photographing her and her mate in all sorts of attitudes, securing thereby an uncommonly interesting series of eighteen pictures — and using up my last plate.

It is dangerous for the camera-hunter in such a rich game-country to be without reserve plates. This I realized keenly enough when, as we sailed back, away out in the middle of the lagoon, we passed close by a mother Black Duck, with her brood of eight small ducklings, all bravely paddling for the rather distant shore. We, too, were shoreward bound, though on a longer voyage. The cold beam wind drove us on, and when the western sky was rosy with the sunset, we rounded the bold red-sandstone promontory, soon to wade ashore and with happy talk of the successful day's excursion, encumbered with big boots and cameras, trudge to the fisher's cottage up on the wind-swept headland of the cold Northern isle, with its bare slopes and stunted spruces.

NEST AND EGGS OF RING-NECKED PLOVER



AMERICAN OYSTER-CATCHER ON NEST

CHAPTER XIV

SHORE-BIRD LOITERERS

Thou call'st along the sand and haunt'st the surge.
DANA.

SOMEHOW shore-birds in their very nature seem to belong to the far North. This, of course, is but the imagining of a New Englander accustomed to see them mainly as swiftly moving travellers, advancing persistently toward the arctic or fleeing reluctantly before its cold. Their quick movements, restless manner, and great powers of flight all fit in with their impulse toward the frozen barrens, until one feels the boreal in their very aspect.

Yet there are species, equally capable of extended flight with this hardy majority, whose members are content with

Southern shores and summer sands. Hence there is no secluded sea-beach or marsh from Texas to the polar sea but what may provide for the bird-lover or sportsman the exhilaration of the mellow, piping whistle of some shore-bird voice and the sight of nimble forms racing with the waves, or, on quick-beating wings, circling out over the water. To me such a shore is a hundred-fold more interesting than those which man has preëmpted with his tinsel hotels and their accessories. The margin of the sea with real shore-bird possibilities is a distinct type of its own; I can tell it at a glance, and often travel far to enjoy it. To the shipwrecked mariner it is a cruel desolation, but to me it is an inspiration and delight. To find it in all its varieties I have journeyed to the north where chilling winds and ice-cold waves lashed the stern profile of the land, and wandered south where soft zephyrs and tepid waters offered their blandishments.

One of the loiterers which has particularly interested me is the American Oyster-catcher. It is a striking species, nearly as large as a crow, — indeed, it is sometimes locally called "Sea-crow," — with conspicuous black and white plumage and a large, red, knife-shaped bill. I have seen it at its best on the outer Sea Islands of the Carolina coast. There it is found on nearly every lonely beach with its area of shells, seaweed, and dry sand above the reach of the tide. Especially dear to it are the tiny islands which at high water are nothing but narrow strips of hummocky sand, almost washed over by the waves in ordinary times, and inevitably in storms. Late in April, or in early May, the female scratches a hollow on the highest mound of sand and deposits large spotted eggs — not four, as do most shore-birds, but only two, like the buzzards that wheel overhead, or the Red-tailed Hawk that nests back in the forest.

We anchor the yacht well off and go ashore in the flat-bottomed tender. No sooner do we land than we see two or four of the Oyster-catchers pattering along ahead of us. Then a pair take to wing and dash by us, at some distance, across the sand and out over the water, uttering piercing cries that call up floods of shore-bird memories. Everywhere we go we shall have oyster-catcher company, until we leave the place. The eggs are lying exposed to view on the open sand, hatched largely in the daytime by the warm southern solar rays. They are not hard to find, if only one traverse the sand-bar faithfully and keep his eyes always alert.

Except in the breeding-season, the Oyster-catcher is a most wary bird, and even at that time it is shy enough. To photograph it is a matter of extreme difficulty. It will not allow

NEST AND EGGS OF OYSTER-CATCHER

one to approach it, and as for placing a camera at its nest, it will seldom go near the nest in the daytime. At times I have set the camera and waited for hours for the forlorn hope. Once, however, I was successful, and I shall narrate the manner thereof.

On one of these island sand-bars I had discovered the two eggs of an Oyster-catcher in a hollow of the sand. We were to anchor there overnight, and I was ardent to achieve a photographic feat which I believed had never been accomplished. The only thing to be done that night was to place a small pile of driftweed close to the nest, to accustom the birds to it. Morning came, clear and hot. First I removed the pile, placed the camera there upon the carrying-case, and carefully focused it on the eggs. Then I covered it up with the cloth and with the debris, trying to make everything look about as before. Two hundred paces away was a great drift-log of pine. My long spool of thread, attached to the ready shutter, would just reach it. We dug out a slight hollow in the sand close alongside of the log and behind it, in which I lay flat, my head raised on my large camera so that I could just peer over the log. I had on a brown hunting suit, matching well with the bark, and my companions, besprinkling me with sand to heighten the deception, left me and embarked upon the yacht, as though the whole party had gone. In one hand I held my opera-glasses; the thread was handy, and I began my vigil of broiling on the blistering sand under the brazen Southern sky.

The deception was complete. The birds saw the party off in approved oyster-catcher style, and then, relieved of all anxiety, settled down to their usual ways of life. They fed along the beach a bit, but breakfast had already been served, and they were not hungry. Soon they trotted up on the dry sand and took their station about thirty yards from me. They

preened their feathers ; now they stood lovingly side by side ; then they walked around a bit, came within ten yards of me, tripped over the thread, continued their stroll, then came back. Now and then one of them, probably the female, would patter down to the region of the eggs, to see that they were all right, and then run back to its mate. As they trotted around me, they seemed to gaze at me intently, and yet apparently did not realize that I was anything more than another piece of wood.

This was all very pretty, but I was becoming terribly uncomfortable. My neck felt at the breaking point, my back sore, and my skin fairly broiled, yet the Oyster-catcher seemed to have no thought of incubating during the livelong day. An hour and a half passed slowly by, when the bird took another run and happened to go close by the camera. For the first time she noticed that something unusual was there. She ran off and brought her mate, and the two looked the thing over, and played hot and cold, as they say. Finally the female seemed to think that the eggs might be getting cooked in the sun, and that she had better shade them a bit. She went almost to them, and ran away from the dreadful lens. This was done half a dozen times, and then what did the pair do but saunter off to the other end of the island! I feared all was up with my little enterprise. But after some moments the mother bird came paddling back. I was so far away that I could not see the eggs, but when she squatted down close in front of the camera, I knew she must be over them. Just as I started to pull the string, her fears overcame her and off she went. It took ten minutes more of manœuvring before she again took her position upon the nest-hollow, side to the camera. As quickly as possible I drew the thread taut. At the click of the shutter she leaped in terror, and away she ran with her mate far from the danger. The game was up, and

I returned to the yacht and set sail, but I confess to a pardonable pride in the fruit of that endeavor.

On that same sand-bar was another pair of Oyster-catchers, but I could find no nest. When I returned a week later, — the middle of May it was, — some hunters, who had just been ashore there, told me they had seen a large young Oyster-catcher running about, had caught it, after a hard chase, and then had let it go. This was at night, and next morning I thought I would find and photograph the youngster. Two of us hunted that strip of barren sand from end to end without being able to detect a sign of the object of our search. Where could it be? There was not a blade of grass to hide it, nothing whatever, and we had examined, we thought, every foot. Once more we canvassed the ground, with the same result. We were back almost to the point of the bar, off which lay the yacht. There were still fifty yards of smooth, wet sand, absolutely bare, — no, except a little insignificant wisp of drift-weed at the water's edge, as big as my hand. Of course it was of no use to walk farther. But somehow it came into my head to go out and look at that seaweed. Lo and behold, if there did not lie the young Oyster-catcher flat on the sand, absolutely motionless! The bird was about as large as the seaweed, and it was as pretty a piece of hiding as I had ever seen.

The young rascal never moved a feather while it was being photographed. But when I thought to take it standing, we had a long, hard tussle. Finally I conquered by sheer persistency, putting my cap over it and removing it suddenly, to snap. When I let it go, it was comical to see those long, stout legs measure off the rods over that sand toward its fond parents, apparently shouting, — in gesture, if not in voice, — "Mamma, mamma, here's your little oyster-cracker coming like a good one." The whole per-

formance completely upset the gravity of our company, and the climax was reached when the next morning I complained that my head was so sore I had hardly slept. Our medical member was amazed that a man who had gone bareheaded for an hour in that blazing sun after a South Carolina "oyster-cracker" should be surprised that his head was sore!

On the same beaches with the Oyster-catcher we shall find the Wilson's Plover, a demure little fellow, gray above like the shingle on which he runs, with a dark band across his white breast. There is nothing spectacular or assertive about him, as with the big Oyster-catcher. He blends well with the

YOUNG OYSTER-CATCHER

quiet of the summer sea and the gentle Southern zephyrs, with which his plaintive and not conspicuous mellow flute-note harmonizes in the pleasing and quieting *andante maestoso.* Superficially he is close of kin to the Semipalmated Plover, our familiar "Ring-neck," and at first glance might be mistaken for it. But closer acquaintance dispels the illusion. There is less of dash and restlessness in this Southern "Ring-neck," else he too might seek the arctic with his cousin. Coloration, too, conforms to this impression of character, in that blacks are modulated to grays. The bill, though, is larger, tracing a line of special kinship with the large Black-bellied Plover, or "Beetle-head."

While the eggs of the Oyster-catcher, owing to their size, are rather easy to find, it requires careful searching to find those of our little plover. Singularly they are but three, though the allied Ring-neck and Piping Plover lay four, — another hint at his general moderation of temperament. The nest-spot is merely a hollow scratched in the dry shingle above the beach, usually where there are pebbles and shells, sometimes, however, under a weed or low shrub. In marking and coloration they blend wonderfully with their surroundings, and one must look sharp to see them. I remember well finding the nest with the usual three eggs on a stretch of gravelly shingle on a sandy key off the coast of South Carolina, and having occasion to find it again to photograph it, in a hurry at that, as the party were impatient to proceed on the cruise, I found myself for quite a while completely baffled. I should have given up, but for the exasperation at my blindness which made me determined to find it. When my eyes, at length, separated the eggs from the stones, I realized that I had passed it a score of times.

One of my prettiest experiences with my sedate little friend was when cruising among the Florida Keys. We had landed

upon one with a shore of shell-sand, having seen from the vessel that behind the fringe of mangroves along the outer beach was a little lake. An occasional flutter of white wings made us all the more curious. The sight which greeted us as we peered through the low mangrove bushes was one I would

NEST AND EGGS OF WILSON'S PLOVER

go far again to see. On a projecting point of the sandy shore was a colony of about fifty pairs of the Least Tern. The females were incubating, and the males preening their feathers on the sand near by or along the margin, their pearl and white plumage showing off prettily against the pulverized shells and the lapping water. Scattered here and there were little gray Wilson's Plovers quietly feeding along the shore or resting on the sand. Out in the shallow water, conspicuous

by their position, on long, stilt-like legs, stood several birds of a kind I had never seen before in my life, another Southern loiterer, the Black-necked Stilt. How gracefully they waded about, probing the muddy bottom for worms or mollusks with their long, sensitive bills! A flock of small migrating sandpipers, probably the Semipalmated, were also feeding along the edge.

Of course the terns' nests were easily discovered, hollows in the sand, quite near together, usually containing two eggs. But it took considerable searching to locate four nests of the plover, now out on the sand, then in the shelter of a weedy clump or under the thin shade of the straggling mangroves. At the very outset we stumbled upon a nest of four eggs of the stilt, and presently found another with three. They were each in the sand back a little from the water, the first by the curious, spreading root of a red mangrove, the other near some weeds. The hollow in each case was prettily lined with bits of shell and a few weed-stems. I wish I could have stayed there alone to study and photograph these pretty life-scenes. The presence of a party of men talking and tramping around throws birds of such timid nature into a state of panic. One needs to be somewhat of a hermit in taste to get the most and best out of such surroundings. Yet we are social beings, and the thought of life alone on a lonely key in Barnes's Sound, scores of miles from human aid, persecuted day and night by horrid swarms of venomous insects, is not altogether attractive.

There is a class of shore-birds intermediate between the boreal and south-temperate extremes of their order. Though not reaching the far north, they yet penetrate within the Canadian boundary, and also breed far south, as well as at intermediate points; such are the Long-billed Curlew, the Great Marbled Godwit, the Bartramian Sandpiper or

Upland Plover, the Killdeer Plover, the Spotted Sandpiper, and the Willet. I shall here write of only the last two of these comparative loiterers, because I have secured life photographs of them.

No shore-bird is more widely known than the Spotted

SCENE ON THE WILLET KEY. PAIR OF WILLETS AND A WILSON'S PLOVER

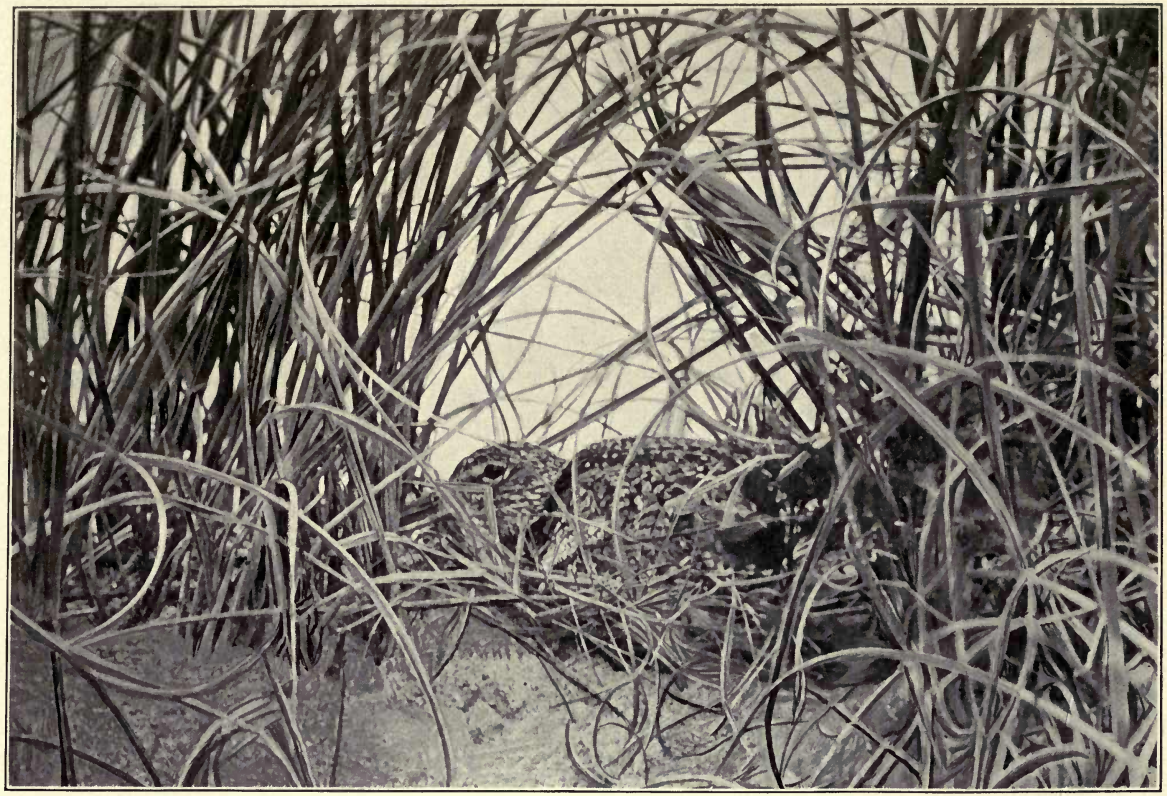
Sandpiper, or "Teeter," the little bird that frequents the farm, and lays its four pointed eggs among the crops, being satisfied with any watery margin, whether it be of brook, pool, lake, or ocean. I have found almost numberless nests, from the far south to the Magdalen Islands, in all sorts of situations. Especially on small islands, indifferently on fresh or salt water, they breed in what amounts to scattering colonies, dozens of pairs to a few hundred acres. Place the camera

by a nest and in a few minutes the mother will come timidly back and allow you, if you keep well out of sight, to take her picture by thread or bulb-release process. The young are quaint little things, and will be found scurrying before one in most unexpected places, their fond mother showing great solicitude for them.

SPOTTED SANDPIPER SETTLING OVER EGGS

And the Willet — what a singular piece of self-assertion in the bird-world he is, at least in the nesting-season ! The name of "Humility," by which the species is often locally known, seems ironical at that time. I have studied Willets by pools on the Western prairies, on marshes of the Canadian Maritime Provinces, on marshes and islands of the Southern coast, and find it ever the same. No sooner does one approach the boundaries of the great tract which it has preëmpted for nesting or for the feeding of its young than one or both members of the pair dash aggressively at the intruder, angrily shrieking out its "yelp, yelp, pill-willet, pill-willet." Each bird alights upon the ground or some stake or stub, watch-

WILLET. "I INVEIGLED HIM INTO ALIGHTING"



WILLET ON NEST

ing, and never stopping its scolding. Then, with redoubled outcry, it dashes off again for another furious onslaught. If one can handle a reflecting camera deftly, here is a fine chance for a picture in flight. On a marsh of a Virginia coast

NEST AND EGGS OF WILLET

island I secured a fine series of Willet pictures by placing the camera on the tripod under a bush, focused on the top twigs of a stub upon which I noticed that the angry Willet repeatedly alighted, and hiding well off in the grass with the connecting thread in hand. Of course the provoking bird would alight on some other stub or go off, and require further stirring up on my part. But during the afternoon I

inveigled it into alighting half a dozen different times where I wanted it to and when I was at the end of my thread and ready, which was more than I could have expected of the obstreperous creature.

The climax was capped in my Willet hunting when, on a key off the South Carolina coast, I came upon a breeding colony of these birds. For several miles there was a rather narrow ridge of dry sand, with frequent clumps of grass or weeds, between the sea on the one hand and the marsh on the other. Several of us traversed this strip systematically, and every few minutes a Willet would flutter out of a clump almost at our feet, and disclose the frail nest of grass and the four handsomely marked, drab-olive eggs. During that day we certainly found fifty or sixty nests, and that by covering only a small fraction of the territory.

In some instances we saw the birds before they flushed. They would then sit very close, believing themselves fully concealed by the vegetation. One such I photographed at close range, focusing the camera upon the tripod within two feet of her, and taking timed exposures. These of course were not wholly satisfactory, as the bird was largely hidden. Not a stalk could be touched without flushing her.

In some cases I tried opening up nests and visiting them after the owners had returned. They became timid and self-conscious, hardly allowing an approach within twenty feet. After great trouble I secured a couple of not wholly satisfactory exposures at long range. It was not till I tried the last nest, just before we were to sail away, that I found the Willet tamer, allowing me to secure a series of timed exposures with my large lens within six feet, which amply repaid me for all the effort I had made and the hot miles I had tramped. Resting on the deck, as the favoring wind filled the white sails and wafted me on to other new and exciting camera-

hunting, I watched, with pleasing thoughts and day-dreams, the isolated sands of the productive key — with its willets, oyster-catchers, plovers, sandpipers, terns, and pelicans — fade away in the distance.

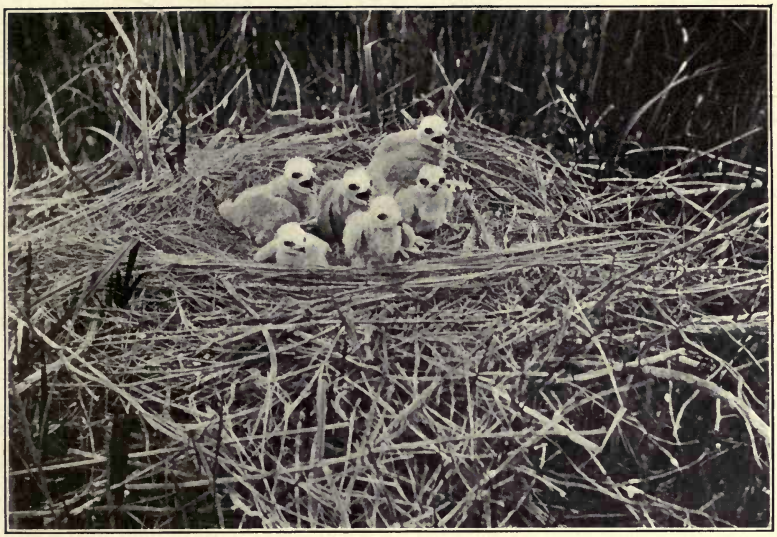
WILSON'S PLOVER

Part V

Raptors and Forest Fastnesses

In a spot that lies
Among yon mountain fastnesses concealed,
You will receive, before the hour of noon,
Good recompense, I hope, for this day's toil.

WORDSWORTH.



NEST AND YOUNG OF MARSH HAWK

CHAPTER XV

THE NEW SPORT OF "HAWKING"

A pair of falcons, wheeling on the wing,
In clamorous agitation, round the crest
Of a tall rock, their airy citadel.

WORDSWORTH.

THE annual spring hunt for hawks' nests appeals to me as a sport by itself, a unique excitement that stirs the blood with a peculiar thrill. It begins when the woods and fields first emit their spring fragrance, to which one's blood, stagnated by indoor toil, responds with new bounds of life. It means strenuous, yet joyous,

activity, driving, tramping, climbing, amid the wildest woodland tracts and forests, always on the lookout, every nerve and sense attuned. So much woodcraft and knowledge of the wild things' habits is involved that success gives a splendid satisfaction. Having found the nest, one may climb the tall tree, — often at some risk, — examine, and photograph the nest, eggs, and young, and, most difficult of all, the parent birds, and subsequently study their habits. The ancient "hawking," where people rode around with a tame hawk or falcon and let it fly at a poor lumbering heron, to see it torn to pieces, was no sport at all, in comparison.

When living in southeastern Massachusetts I was accustomed to find over thirty nests of hawks and owls — mostly the former, and not including the colonizing Ospreys — each season. Each nest involved a separate hunt, and it meant hundreds of miles of rough exploration, but it was perfectly splendid sport.

My method of ferreting out the hawks of a given territory is to begin in late autumn, when the leaves have fallen, and explore the region thoroughly, noting especially the groves or tracts of large timber and the presences of old nests — platforms of sticks in the forks of tall trees. These trips serve for needed outing and exercise all winter. A few of the hawks remain about their old haunts throughout the year, and in early spring the absentees return. The continued presence of hawks in or about certain woodland tracts is a good clue, especially if they can be detected carrying building material.

When the nesting-season arrives, I visit the likely spots, and with an opera-glass critically examine every nest in sight. Unlike the owls, hawks more commonly build their own nests, though they frequently add to an old one, or even use a leafy

squirrel's nest as a foundation. They are apt either to use their last season's nest or build another near it. There is a peculiar appearance about a new hawk's nest. Only sticks are used, except for the inside lining. In the old nest the material is rotted and matted together ; in the new each stick has an individuality, and stands out from the rest. Often the ends of the sticks are newly broken, hence light in color, and there is a general look of freshness about the whole. Best of all signs, in most cases, though not always, some shreds of downy feathers cling to the occupied nest, or to the branches near it, — more and more as incubation advances.

A blow or two on the tree-trunk will often banish doubt by starting the incubating hawk, but it is well to make as little noise as possible. Some individuals are exceedingly shy, and will not await a near approach. One Red-shouldered Hawk, whose nest I used to visit, would leave the nest and flit silently off as soon as she heard me coming. It was only by extreme stealth that I could catch even a fleeting glimpse of her. To pound trees indiscriminately would drive away all such birds long before the seekers came within sight of the nest. On the other hand, occasionally, and notably on a rainy day, the hawk will not move a feather for all the pounding one can do. To obviate the need of pounding the trees, and as more sure to flush the sitting bird, I have often used a rubber sling-shot, and a pocketful of small pebbles, which last can be replenished by the roadside. Many a fine hawk have I seen leave the nest in a hurry, even when the stone did not strike its mark, but simply whizzed by. It is often puzzling to know when it is best to climb to a nest. All we can do is to look sharp for signs, and act accordingly. I used to climb whenever in doubt, but after ascending about a thousand tall trees for nothing, I am now content, in most cases, to await further evidence.

Now let us go "hawking." Middle April opens the season, when the Red-tailed and Red-shouldered Hawks have just laid their eggs. It is the twelfth this time, and we start out early from North Middleboro, Massachusetts, in the buggy, behind my speedy little mare. Never was there a more beautiful early spring day. The songs of Robins, Bluebirds, Song Sparrows, Pine Warblers, the newly arrived Chipping Sparrows, and others fill the air. Barn and Tree Swallows add grace to the quiet scenery of the gently rolling landscape of the Pilgrim county. The loud honking of a passing wedge of Canada Geese on their way north rings out now above the other sounds.

Our first quest shall be the huge nest of a Red-tail on an enormous white pine on the edge of a swamp, to which on the twenty-second of March I happened to see the hawk fly with a stick. We drive up the sandy old New Bedford turnpike, three miles or more, to North Lakeville, near the tack factory, and turn down the lane to the old abandoned "hermitage," where we hitch the horse and follow a path. It leads almost to the tree, and there is the nest. Now watch while I pound, and start the hawk. Nothing stirs. Is it possible that I was mistaken in my former observation? No, there she spreads her wings, and away she goes over the tree-tops! A good sixty feet it is, and no branches near the base, so the climbing-irons must be buckled on. Shall I guess at the contents of the nest? Three eggs. For a wonder I am right, for the Red-tail in New England seldom lays more than two. Meanwhile the female has returned and is protesting. Her harsh screams have been compared, not inaptly, to the squealing of a pig, — "pee-eh-h, pee-eh-h-h," they sound like, to me. The male has heard, and he follows, though rather far off. It is fascinating to sit here in the sun and see them soar, but we must be off to other adventures.

Now we will drive a mile west and try a pine grove, where a pair of Red-shoulders always nest. The Barred Owls that used to breed here have gone, but the hawk proves constant. There goes one of them from near the last year's nest. It is an easy climb of thirty-five feet, plenty of limbs, a regular step-ladder pine. Not an egg is yet laid; this particular pair is habitually later than the others that I know of. Some of them are already incubating their sets, but in this case, judging from past experience, the eggs will hardly be all laid before the twenty-fifth. There will be three or four; the Red-shoulder is more prolific than the Red-tail.

Last year another pair of Red-tails had young in a pine swamp away out beyond Lakeville Precinct, and probably have nested there again; so we will drive out there over that narrow road where for miles we see but one house. Here is the pasture where we will leave the horse; the nest is just across the edge of this swamp on the border of a clearing. Almost entirely blown down! Then we must search the big tract through, separating and working systematically in parallel lines. It gets tiresome, but let us not give it up. "There she goes," — did I hear a shout? Yes, and the hawk is sailing over my head, just above the trees, and, wheeling, her tail, dull red above, flashes in the sun. You did well to see that nest almost hidden from observation in that unusually thick pine, again sixty feet from below. And how much wilder she was than the other, to leave the nest at the first rap! There will not be three eggs this time, only the usual two, but beautifully spotted. We are more than satisfied as, under the lengthening shadows of the woods, the horse fairly flies toward her bin of oats.

In western New England in the hill country, the Red-tail's favorite nesting-site is on some tall chestnut or oak growing from the foot of a steep, rocky declivity a little way up from

THE CLIMB TO A RED-TAILED HAWK'S NEST
"MY FRIEND CLIMBED"

the base of a mountain. The rocks rise so abruptly that often the observer can walk very near the nest, and not infrequently see into it. On the sixteenth of a recent April I visited a fine tract of old deciduous trees on a side hill where I had seen a pair of these hawks so frequently that I was assured of their nesting. Hardly had I entered the grove, halfway up the hill, when I noticed a nest on a tall chestnut, but so far below me that I found myself gazing upon the back

of a great hawk as she sat upon the nest. Our glances met, and she instantly flew. The hollow of the nest concealed the contents from view. A week later I returned with a friend, and climbing-irons. The hawk flew as we neared the nest. My friend climbed and found two eggs, while I took a picture of the nest and his descent from it.

The Red-tailed Hawk builds the largest nest that is ordinarily found in the woods, yet individual nests vary. The one just mentioned was so flimsy an affair that I should have dismissed it without further thought, had I not seen the hawk. The year before, in fact, I passed it by, when it was undoubtedly occupied. It was very unlike the first one that I found, near the village of Middleboro. I was searching a tract of very tall pines, when, on the border of a wood road, I saw an enormous bristling mass of sticks, very high up, the sight of which instantly quickened my pulse. A stick with which I tried to strike the tree broke off in my hands at the first attempt. But the great Red-tail above heard it, and sailed off gracefully as a fleecy cloud. How I hurried up that tree, and then gazed and gazed at the two large eggs that lay in the slight hollow of that great platform nearly a yard across, on a slight lining of moss, bark, and pine twigs! This bird was not demonstrative, but after circling and sounding the usual harsh squeal for a few moments, departed, followed by a few angry crows.

Consistency seems to mark the whole career of this red-tailed tribe. The bird is big, lays big eggs in a big nest, and that earlier than any other hawk. For convenience' sake we look for the nests of the Red-tail and Red-shoulder at the same time, but in fact the former is fully a week ahead, on the average. I have even known of incubated eggs being found in the last week of March, when snow was on the ground, and the weather quite cold.

It is well known that each pair of raptorial birds preëmpts its own private hunting-preserve, from which it tries to exclude all others that might create troublesome competition. But there are curious exceptions. Smaller hawks of other genera are frequently allowed to nest near by, though not very close. Now and then smaller species of the same genus are, apparently, not deemed dangerous enough rivals to be driven off. I have known Broad-wings to nest in the same woodland tract with each of the two larger species. Never, though, have I found two pairs of the same species — save the social Ospreys — nesting near together. Perhaps marital jealousy has something to do with this. In some instances I have known two pairs of the Red-shoulder to nest not far apart on opposite sides of a road. Probably neither of them crossed the road into the other's territory.

It is worth noting that hawks and owls of the same size often share the same haunts, both for nesting and for hunting. Interesting, too, is the fact that the Red-shouldered Hawk seems to fraternize with the Barred Owl, while the Great Horned Owl and the Red-tail are in the same way associated.

I must confess to a feeling of partiality for the Red-shouldered Hawk, probably because I have for years lived on intimate terms with the species. In Middleboro and surrounding towns there were ten pairs that I used to look up from year to year, and a number of others with which I had casual acquaintance. As time went on I discovered that most of these hawk families had a distinct individuality.

My prime favorites were the "Dean Woods" pair, noisy, not so shy as some, building a large new nest each year near the old one, forty-five feet or so up some white pine. They always had four large eggs, distinctively blotched, so that I could have told them from the eggs of any other pair. The

"Crocker Leonard" pair were shy, tenacious of their adopted pine grove, nesting rather low, and laying late. My "Murdock Street" pair were the first of the season to breed, having eggs usually by the fifth of April. They built high

YOUNG RED-SHOULDERED HAWK (FLORIDA)

up, and had much of their white down clinging about the nest. Then there was the "Hermann" pair, the shyest of them all, but which atoned for their lack of cordiality by laying three most beautifully clouded eggs each season. My

"Pine Street" pair were the bold ones. When I climbed to the nest the female would hover close to my face and menace me with her claws, making such a hubbub that once a companion, who was waiting outside the pine swamp in a buggy, thought I must be plucking the hawk! The "Raynham" pair near Taunton had acquired the happy faculty of laying litters of five — a rare gift for the species. And thus the gossip might continue about the affairs of other hawk households.

Occasionally I have appropriated a young hawk — of this or other kinds — as a pet. To prevent the infliction of unintended cruelty, let me say that young raptorial birds should never be kept in a soft nest, but on something similar to their home nest, which they can grasp with their feet, else their legs will become paralyzed. They require raw meat, but clear, soft butcher's meat alone, lacking lime, will eventually cause rickets. In the natural state they eat their prey in junks, — bones, and fur or feathers included, — which indicates the proper diet.

By the end of the first week in May, in New England, another group of hawks have completed their layings, and we must start out afresh to observe the Marsh Hawk, Cooper's Hawk, and the Osprey, in their respective haunts. Hardest of all the hawks to locate is the Marsh Hawk, because it nests on the ground in tangled swamps, protected by thickets, weeds, or briars. The swamp tracts in southern Massachusetts are so dense and interminable that, though I knew of various pairs of Marsh Hawks, after many vain endeavors I almost despaired of finding a nest. But at last a hunter told me of a larch swamp near Precinct Station, Lakeville, where a pair had bred for years. The swamp, though very wet and dense, was only a quarter of a mile in diameter, in a hollow between hills, and there was a chance of being able

CAPTIVE RED-TAILED HAWK IN THE ATTITUDE OF WATCHING FOR PREY

to explore it thoroughly. My first visit was on the eleventh of May. Pulling up the tops of my long boots, I struggled through the dense fringe of alders on the edge, and emerged in a rather open area of long grass, low bushes, and stunted

CAPTIVE COOPER'S HAWK

larches, the ground being very wet and spongy. The very first bird to appear was a fine white male Marsh Hawk that flew hurriedly out of the swamp, and returned now and then high in the air to see what success I was having.

There was nothing to do but to beat through the tract systematically, and I went at it with a will. Back and forth, round and round, I plodded. I was soaked by falling into bog-holes, and perspiration ran in rivers. At the end of three hours I was deliberating an inglorious surrender, when suddenly from the grass and bushes about ten feet from me, a little to one side, up sprang the female Marsh Hawk. What a fuss she made, flying back and forth over me within easy gunshot, and keeping up an incessant screaming and cackling. I hastened forward. The grass was matted down on the south side of two small larches in a rather open spot. The bird had built a slovenly nest of coarse weed-stems and grass, flat on the ground. It contained two dirty-white eggs, unspotted, the set being still incomplete.

Next season I did not get to the swamp till May twenty-ninth. I had another long search, until finally, as I was away down at the other end of the tract, the female began to fly around in evident anxiety. It was for a time a game of "hot or cold." When the hawk relaxed her efforts, I knew I was on the wrong track, and as she grew more excited, I knew I was making progress. At length I came upon a nest similar to the first, containing five young, in various stages of growth, one apparently just hatched, and the oldest several times as large; the eggs must have been laid by the end of April. This time Mrs. Hawk fairly outdid herself. I had brought a youth with me to help patrol the swamp, and he really thought the bird would scratch his eyes out. She dived frantically at our heads, scratching at us with her claws. Once or twice she actually struck me. Indeed, I know of a man who was driven out of a berry-pasture by one of these hawks, which doubtless had young in the bushes. Next year my harriers nested again near where I first found them, and there were five fresh eggs on the thirtieth of April.

By May tenth it is the height of the nesting-season for the Cooper's Hawk. This species is preëminently the most destructive of the raptorial tribe in the United States, though

NEST AND EGGS OF COOPER'S HAWK IN CROTCH OF CHESTNUT

if the Goshawk were more common it would deserve the palm. It pounces upon every living thing it meets that is not too large for it. Ordinarily wary enough, its dash and boldness in pursuit of prey are amazing. Not long ago a gentleman called to me as I passed along the village street, asking me to come to his hen-house and see a hawk that was after his chickens. It was a Cooper's Hawk, as I had antici-

pated, and there was the rascal, well up in the air, circling about with alternate soarings and a series of quick flappings. Despite the fact that two men were working right there, and had a gun close at hand, no sooner would they get to work with saw and hammer than down the hawk would dash and snatch a chicken within a yard or two of them. Twice or thrice it had tried, but the men had rushed at it and made it drop the chicken. For twenty minutes I held the gun while the men worked, but the hawk kept its distance. Then, as I could not wait, I stood the gun against the coop and started off. In a moment, hearing a commotion, I turned and laughed right out to see the fierce bird flopping over the ground with a chicken in its claws and a big man, shouting and gesticulating, making such a rush that the hawk, seeing that it was about to be caught, let go the chicken — which was uninjured, save for a slight scratch — and was off. It alighted on a tree, and I followed with the gun, but it was too wary for me.

The situations chosen for the nest are usually tall, slender trees in groves or woods. In Plymouth County, Massachusetts, it selects a pine, in western New England usually a chestnut. I have never found it lower than thirty feet from the ground; usually it is from forty to fifty. The nest is large for the size of the bird, a great rough pile of sticks. It is very characteristic of the nest that it is unlined, save with scales of rough bark, which would seem to be almost worse than no lining at all. But the hawk doubtless knows what it wants.

My earliest date for eggs of this hawk was the twenty-seventh of April. It was a raw, threatening day, but I drove away off to the eastern edge of Middleboro to explore new country, where hawks had been seen, and to go through a great cedar swamp. Nothing whatever was found, and to-

ward night, on the way home, passing a pine grove, I hitched the horse and went in, following a high ridge, pine-clad, that ran through the woods. On one of these trees, overlooking the steep ravine, I saw a fresh nest of good size. As I struck

SAME NEST AS LAST, WITH YOUNG

the tree, I expected to see a Red-shoulder flop leisurely off. Instead something left the nest with a dash and a whir, as though it were a projectile shot from a gun. This was typical of Cooper's Hawk, but it was so early in the season that I could not feel assured of the bird's identity till I found myself gazing at the five bluish-white eggs, marked with a few sparse brown spots, and heard the familiar "cac-cac-cac"

from a distance in the pines. Then I drove home with the eggs in a raging, late, wet snowstorm, cold, white, but not "white-washed."

Usually these hawks are silent and retiring when their nesting haunts are invaded, but on occasion they can be very vociferous. A pair once advanced to meet me, as I went through a grove in East Taunton, Massachusetts, one twenty-fifth of May, flitting from tree to tree and scolding at me with all their might. Suddenly they disappeared. There were a dozen old nests about, and I could not decide which to climb to, so I withdrew for a while. I went farther than I intended, and it was nearly dark when I got back. It was not until I rapped the very last tree that the hawk whirred off into the gathering gloom. There was the nest fifty feet from the ground, up a slender pine that had no limbs, save rotten stubs, until one almost reached the nest. I confess I dreaded the climb alone there in the dusk, but I made it, and found five big, dirty eggs, well incubated, the second set of Cooper's that I had discovered that day.

It was with the Cooper's Hawk that I first made demonstration of the fact that the wildest hawk can be photographed upon the nest, if sufficient time be taken, and proper methods used. It is hard enough to photograph a hawk's nest from an insecure perch in a lofty tree, but it is as nothing compared with doing so when the adult bird is upon it.

In the present instance I found a new nest in a hemlock tree, in some mixed woodland, forty-two feet from the ground. After the eggs had all been laid for some days, I began work by nailing up low in a near-by tree a small box with a round hole in one end and a cloth over it, in rude imitation of a camera. The hawk was so shy that she would fly even before I came within sight of the nest. I gave her about

a day to study the instrument, and then screwed it about five feet above the nest, pointed down at it. When I came again I rejoiced to find she had not deserted. So I replaced the box with the real camera, focused and made ready, and covered it with the same cloth.

This done, I attached to the shutter my long, strong thread, dropping the spool end to the ground and laying out the line of communication to a bower which I had previously built under some thick hemlocks, as far away as I could see the nest through the trees, where I hid myself, lying flat on the ground and peering through a loop-hole. For half an hour all was silent. Then the hawk began her clatter near by, flitting nervously from tree to tree. After a while she

COOPER'S HAWK INCUBATING
"THE WILDEST HAWK CAN BE PHOTOGRAPHED UPON THE NEST"

suddenly darted on to the nest and I made the exposure, without causing her to fly. It would have been successful, save that, in setting the camera, I had accidentally exposed the plate, and so had a double picture. A subsequent attempt was entirely successful, though the hawk almost found me out, for she alighted close above my head and kept me lying face downward for ten minutes without moving a muscle, while the swarms of mosquitoes were doing their worst.

Since then I have learned that hawks — notably the larger kinds — seem to know when a person has not left the woods, and will often refuse to approach the nest until one has really gone. The best way to deceive them in such a case is to take a companion to the spot, get well hidden, and then have the other noisily withdraw.

The magnificent Osprey, or Fish Hawk, is another species which, in the latitude of New England, lays its eggs in early May. Osprey "hawking" is very different from what I have been describing. Nests are often placed in solitary trees on open land near water, sometimes close to a house, as is the case in southern New England. I have seen one on the cross-piece of a telephone pole, and they have been built on chimneys or other strange places. The nests are usually enormous, and it is frequently very difficult to get above to photograph them. Meanwhile the old birds will sometimes menace one in the most ferocious manner, though I never knew one actually to strike. They generally lay three eggs, rarely four, very heavily and strikingly marked.

I have also studied Ospreys on various parts of our Southern coast, where they nest in pineries or swamps, often in the vicinity of nests of the Bald Eagle. They are often tame enough to alight on the nest when one is standing beneath it, and many a camera-shot have I fired at the hovering birds.

Somehow, though, it is by no means as easy as it looks to obtain a large, sharp, first-class picture.

The aforesaid Bald Eagles are much harder subjects for the camera. Their nests are huge, and usually high in monster trees, and the owners are always difficult of approach. They nest very early in the season, in Florida even the year before, one might say, — about December, — so that I have always come too late even to find young.

Coming now to our late breeders, the Broad-winged Hawk is about the same size as the Cooper's, but in form, habit, and movements is very much like the Red-shouldered. Sometimes it soars about uttering a peculiar shrill whistle, which a German friend of mine, who was a great hawk-hunter, and had a pair of these hawks on his farm, thought was a "grieved note," as he called it, of the female Red-shoulder, deprived of her eggs. But presently his birds quieted down, and, selecting an old nest in a pine grove near by, soon after the middle of May rejoiced in the prospects afforded by two smallish brown and lilac spotted eggs.

Two eggs is the usual number at one laying, though I have found three. And though May twentieth is the standard date for the full set, it is sometimes earlier, for I once found a nest in a low pine on May fourth with one egg, and the set of two, which I examined on the ninth, had probably been completed by the sixth. This same pair the next season made a nest in a pine a few yards away, only nineteen feet from the ground, in which were three eggs. When disturbed, the female gently flapped off a couple of gunshots, and, alighting in a tree, motionless and silent, awaited the departure of the intruder.

Another nest of Broad-wings which I found was in a most picturesque spot, in Kent, Connecticut. A large mountain brook leaps forty feet over a precipice in some dark hemlock

YOUNG SHARP-SHINNED HAWK, RAISED FROM THE NEST

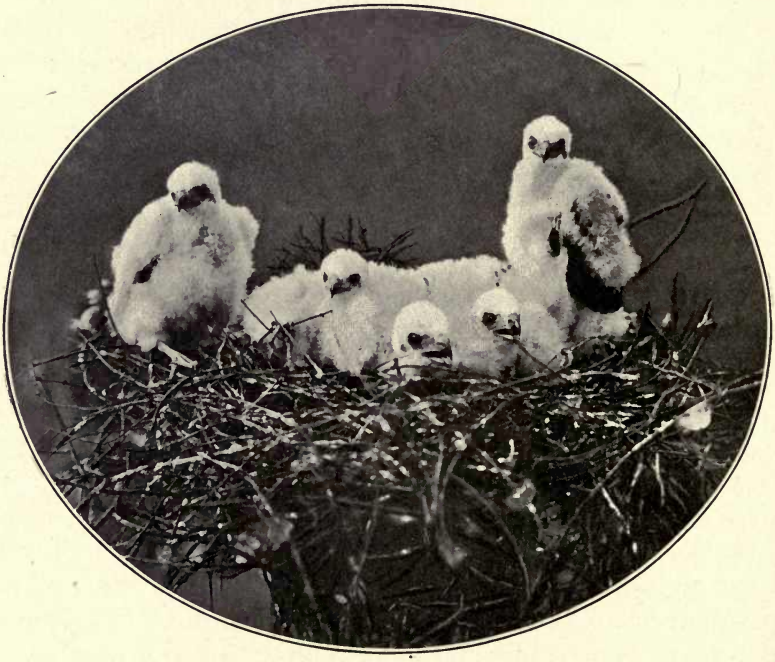
woods, and goes roaring down a series of cascades. On the seventh of May, as I was following up the brook along the cascades, a Broad-winged Hawk flew out from some tall hemlock and deciduous trees bordering the brook on the other side, and circled three times over me, in a rather threatening manner, I thought, returning then to alight in a tall oak, where it sat quietly.

I was convinced that the bird was nesting, so I crossed the brook by a bridge farther up, and reached the spot. The hawk was not to be seen, but I saw an old squirrels' nest, forty feet up a chestnut-tree, that had some fresh sticks laid across the top, which made me confident that the hawk was

rebuilding this nest. It was not until the twenty-fifth of May that I returned, in a pouring rain. As I expected, the bird was on the nest, her head raised to watch the intruders. A blow on the trunk made her flap slowly off. She alighted in a neighboring tree, and kept uttering her shrill, high-pitched, whistling scream, flying now and then to circle a bit, and alight in another place, never far from home. I found that the nest was the usual rude structure, a layer of sticks added to the squirrels' nest, and a lining of leaves and bark, in which lay two of the most beautiful eggs I had ever seen, the white background being heavily blotched with rich brown, giving the eggs a strong resemblance to those of the Sharp-shinned Hawk, except for their larger size. The whole scene — the handsome eggs, the hovering bird, the woods dark in the storm, and the wild, thundering cataract close by — takes its place in my memory as one of uncommon grandeur.

Few happenings in "hawking" please me more than finding the nest of the little Sharp-shinned Hawk. It is a neat structure of clean new twigs, without any lining whatever, usually well up a slender evergreen tree of some sort, in the woods. The birds are very jealous of intrusion, and will sometimes thus betray the vicinity of the nest. One thirteenth of May as I passed through a grove of young pines with a fellow naturalist, a pair of these little hawks set up a tremendous outcry, and even swooped at us, as we went peacefully along the cart-path. This set us to searching, and very soon I climbed to the nest, and found it completed, the eggs not yet laid. Two weeks later I took the beautiful set of four, despite the angry dashes of the mother, and much to the joy of the farmer whose chicken-yard, close by, had been almost depopulated by the pestiferous little raptors.

Another year a young friend, wishing to please me, set out alone to find a hawks' nest. I lent him my buggy, and he drove many miles, returning empty-handed, as I expected. He reported that he had not seen a sign of a hawk, nothing but some birds about the size of Robins that had made a great fuss and swooped at him, in a thick pine grove. There were two nests built of sticks close by, high up in the trees. Climbing away up to one, he found it empty, and in vexation departed, exclaiming, "You 're no hawks, nothing but Robins; you can't fool me!" Next day, May eighteenth, I drove there with him, ten miles from home, and a mile down a logging road into a swamp, where I had him climb



"A BROOD OF TINY SHARPSHINS IN THEIR NEST"
TAKEN FROM ITS SITE

to the other nest, from which one of the "Robins" had flown as I rapped the tree, and in which, much to his surprise, he found five Sharp-shinned Hawk's eggs!

A recent Fourth of July was very pleasantly passed by a mountain lake in Kent, away from the noise of man, but close to the heart of nature. The pleasantest part of it all was when, astride a branch forty feet up a hemlock, on the mountain-side overlooking the beautiful lake, I played with a brood of tiny Sharpshins in their nest, downy little fellows, no larger than newly hatched domestic chickens. Their mother was not so bold as some, and remonstrated only vocally from a distance. The nest contained feathers and bones of small birds, and yet, presently, just under a neighboring tree, where I sat to watch the hawk, a beautiful Black-throated Blue Warbler and a pair of Canada Warblers were gleaning insect food for young, unmindful of "sharpshins" which were liable at any time to be felt and to make orphans of their children.

I will conclude this description of the hawks in their wild fastnesses by some account of their resorts as I have found them in North Dakota. In various explorations in strips of timber along the shores of lakes and rivers, in early May, I have found the Red-tailed and Cooper's Hawks breeding abundantly, with the Swainson's and Sparrow Hawks getting ready to do so. The Red-tail here is the geographical race or subspecies called Krider's Hawk, but it is essentially our old friend of the East. About every half-mile along the Goose River — wonderfully crooked, as are all prairie streams — I found a huge nest high up in some enormous tree, usually an elm, seldom less than eighty feet from the ground. I wanted to see the eggs of Krider's Hawk, yet did not feel equal to such terrible ascents. Fortunately I met a sailor, who was glad enough to go aloft from that flat prairie, — in

consideration of a dollar, — and climbed to two of the nests, from each of which he safely brought down three large white, spotted eggs. One tree gave him such a dangerous climb that he did not dare to descend by climbing-irons alone, and he sat up in a crotch until I could secure a rope at a distant farmhouse. The female in each case left the nest as we approached, and the pair circled about overhead with the same harsh squeals to which I was accustomed.

I found the Sparrow Hawks very common in most of the timber-belts that I visited, as well as in the extensive forests of the Turtle Mountain country. One or both of the pair will be seen perched on some bare limb, and not far away is the hollow they have chosen for their nest, usually a rotted-out knot-hole. Early in June, if not before, the female deposits her four or five brownish, finely speckled eggs, and then the pair become more solicitous over intrusion. The female darts from the hole, when both birds fly about and scold angrily. The eggs, though always of the unmistakable brown type of the Falcons, vary a good deal. In one very curious set that I secured by the Sheyenne River, two of the eggs are almost round and a little irregular, looking a good deal like small potatoes.

The Swainson's Hawk is a typical bird of the prairies, a large, heavy creature, slow but graceful in flight. It is one of the commonest sights to see it soaring over the prairie, especially if there be timber near, or standing on a knoll or a fence-post. It is the tamest hawk of my acquaintance, and it will often allow one to drive, or even walk, very close to it. Many an isolated tree, even though but a few feet high, bears a bulky nest that looms up miles away as one traverses the plain. I have also found the nest in clumps of bushes. In the many that I have examined, the number of eggs has been from two to four, usually three. The female sits on them

PAIR OF SPARROW HAWKS IN CAPTIVITY

quite persistently, but on a close approach flies out and circles in the usual buzzard-fashion, uttering harsh screams that remind me very much of the notes of its relative the Red-tail. I once approached a nest whose owner was more disinclined than usual to leave it. She looked down at me over the edge, but would not fly until I struck the tree several times. Then, before I could climb, she returned to the nest, though it was but thirty feet up. I expected on my last trip West to be able, without much trouble, to photograph these hawks on their nests. Probably this could be done ; but I found so much to occupy me that I could not take time for the attempt.

Though Swainson's Hawk is very common in Dakota, I think that the first rank in abundance must be conceded to the Marsh Hawk. One cannot travel far on the prairie without seeing the long-winged bird with a band of white on its rump quartering about low over the ground, now and then suddenly dropping into the grass to catch a gopher, or perhaps an insect.

The best place to find their nests is in the grass just up from a slough, or even away from water in a depression of the prairie, in coarse grass where water has formerly stood. At times I have roamed for scores of miles without finding a nest. And then again, when I have happened upon a favorable locality, it was the easiest thing in the world to discover them. The nest itself is inconspicuous, a mere little rim of grass and weed-stems, though again, when built on wet ground, quite a platform of the same material is constructed. One Memorial Day a friend and I were taking a tramp on the prairie, and came across a little alkaline lake, with mud-flats, and, up from its edge, patches of dried weeds. I flushed a Mallard in one of these latter from eleven almost hatched eggs, and, singularly, only a few rods away, a female Marsh

Hawk, when closely approached, also started from her nest, with three newly hatched young, clad in yellowish down, and three eggs not yet hatched. Across on the opposite shore of the pond, not a quarter of a mile away, we put up another Marsh Hawk from six half-incubated eggs.

A few days later, the third of June, we had a wonderful experience with the Marsh Hawks. Driving eight miles from camp, we searched two closely adjoining sloughs, in all a territory about a mile square. Not to speak of numerous ducks' nests, and others, we began by flushing a Marsh Hawk, about ten yards from us. Her odd family consisted of two young, three normal eggs and one small runt, six in all. Shortly after this, one of my companions, coming out into the slough to see a Sora's nest that I had found, discovered another Marsh Hawks' home in the meadow grass where there was a little water. It held six young and was necessarily quite a structure, measuring eighteen inches in height and thirty across. Plodding out into the next slough, another Marsh Hawk made some fuss over a nest I did not take the trouble to hunt up. At the farther end of this slough I found two more nests, only a few rods apart, the first with six eggs, the other with four young and an addled egg. As we drove home, the dogs, ranging out on the prairie, started still another hawk from its scant nest in a little depression, with four eggs. I took pictures of several of the nests, and, all in all, it was preëminently a Marsh Hawk day.

A fine, striking raptor of the prairie is the Ferruginous Rough-legged Hawk. No one can well mistake it, with its light breast and white tail, as it soars about. In disposition it seems much like the Swainson's Hawk, being rather quiet and not particularly shy, though it is a very solitary bird, and retires more and more into the wilder parts as the country becomes settled. Like the Swainson's, it builds large nests on

trees in timber-belts or isolated patches, but it is also partial to ground-building on the slopes of rocky knolls of the prairie from the central parts of North Dakota westward. In either case, when the nest is approached, the owners hover and scream with considerable boldness and vigor. The eggs are laid early in the season, about the first of May, — the laying-time here also of the Red-tail, — and are from three to five in number, usually handsomely marked specimens.

On the Memorial Day just spoken of, I saw an interesting nest. It was in an oak back from a lake, about forty feet from the ground. From far out on the prairie I could see the head of the female sticking up over the edge. Away she went, spreading her white tail, as we drew near, and manifesting her displeasure as long as we remained. Part of the time she flew back and forth just over the tree-tops with angry screams, and then she would rise in the air and soar with her mate. There were five young, picturesque indeed, as were their fine white-tailed parents and the beautiful surroundings.

I was also privileged to see one other raptorial bird in Dakota that I had never seen before. Though I had occasionally seen the Bald Eagle in the East, circling, or perched on some tree, usually near lake or river, the majestic Golden Eagle was a stranger to me. One day I was shown a splendid specimen alive that had been caught in a trap, and not long after that, early in June, as we were jogging along over the wild prairie, uninhabited by man, away up near the Manitoba boundary, I saw an enormous bird sitting on the ground. We drove toward it, and got near enough for a good view with our glasses before it flew. Spreading its great wings, it majestically flapped into the air. After a little upward flight, it extended its wings to their full length, and without another effort, simply soared in circles, up and up, until it actually

could be no longer observed in the zenith by the naked eye. It was the Golden Eagle, noble of form and majestic in flight. The whole scene in its impressiveness suggested to me the upward course of the human soul from things low and sordid to wisdom, strength, and purity, to eternal heights as yet beyond our ken.

YOUNG RED-TAILED HAWK

"FOR SOME YEARS A PAIR OF BARRED OWLS NESTED IN THE CAVITY OF AN OAK"

CHAPTER XVI

OWL SECRETS

The night-owl, hushed and trancèd, bates
Its cry, and in the darkness waits.

STEPHEN HENRY THAYER.

CLOSELY related to the sport of "hawking" is that of "owling." Indeed the latter is properly a department of the former, and in some measure is to be carried on along with it. It is really much the more difficult of the two, for the owl has the faculty and habit of so closely safeguarding its secrets — its domestic affairs in particular — that, to the enthusiastic bird-lover or camera-hunter who

keenly craves a thorough knowledge of the *whole* avifauna, the success of the owl in eluding him is simply maddening. Indeed it is so hard to find an owl's nest that one would need "hawking" — if for no other reason! — to fill in between times and provide sufficient stimulus to keep one's enthusiasm from flagging.

Owling differs also from hawking in that each recurring season it ushers in the nesting of the birds, and with it the sport with the raptors begins. The owls are as early as they are hardy. In fact the last of the owls to lay its eggs — the Screech Owl — has done so by about the time that the earliest of the hawks are beginning their family cares. The Great Horned Owl is the first of all the birds to nest. Think of the hardy mother, on an open platform of sticks in some tall tree of a hillside forest, brooding her eggs in February, — sometimes even January, — the raging blizzard heaping up the snow around her and on her back, or on the clear, cold nights when the mercury has fallen far below zero!

Another difference between these allied sports is one of method. In part, to be sure, the methods of each are identical. But owls are so comparatively scarce that merely to search the woods for them would be very unrewarding. The best clues to their whereabouts are secured through their habit of hooting. One may rest assured that somewhere near any locality where owls are habitually heard to hoot they will nest when the proper time comes, though to find the nest is quite another matter. My habit is to drive or walk out, beginning in January, on mild, muggy afternoons toward dusk, along roads bordering favorable woodland tracts. It is notable that owls are particularly inclined to hoot at dusk, more so as the nesting-season approaches, when there are indications of storm, especially rain. At such times, if there are any owls in the vicinity, the listener is very likely to hear what will

thrill him with joyous enthusiasm. In case one does not hear the owls for himself, it is well to inquire of farmers or woodsmen and ask them, if they hear any in the future, to make note of the exact spot whence the hooting seems to issue.

Sometimes, toward the end of a lowering winter afternoon, I drive along a road near the village of Kent that approaches Leonard Mountain on the north side, and stop to listen. After waiting awhile, at length I hear, issuing from the hemlocks halfway up the steep declivity, a baritone voice mellowed by distance, giving an impression of power and wildness. There are three syllables: the first is prolonged and tremulous; the others follow quicker and shorter, yet not without deliberation, — "Whoo-o-o; whoo, whoo." I need not the reminder of the song to

"Listen to the hooting of the Great Horned Owl."

At intervals of a minute or two the cry is repeated, with some intermissions, usually ceasing about at dark, when the fierce creature "bates its cry," lurking silent and watchful for prey. And meanwhile, from another spot farther along the mountain, another voice of softer timbre is heard, the answering cry of the smaller male bird. These hootings are almost invariably followed by stormy weather, and the owls are recognized as an excellent "farmers' almanac."

Toward the end of February these cries proceed nearly every night for a week or more from one locality well up on the mountain, and here it is that the nest, a rude platform of sticks, upon some fine old hemlock, is being repaired and the two white eggs laid. Again and again I have carefully located these cries up on old Leonard Mountain, and tried to reach the place whence they proceeded, only to wander along the precipitous ledges through the wild forest maze. Though I have often been successful in other woodland tracts, it is

not for me to assume what the Psalmist attributes to the Creator, — "I know all the fowls of the mountains."

Because the doings of the owl are shrouded in mystery and his ways almost past finding out, the spell of the secret things is upon me and has inspired many a wild ramble, aggregating thousands of miles. My earliest searchings for the mysterious owl were in and around the outskirts of Boston. Ever memorable was my first view of an owl in nature. It was many years ago, a cold, blustering morning in early March. Traversing a frozen cedar swamp on the shore of Hammond's Pond, Newton, my heart fairly bounded as I came right upon a tiny little Acadian or Saw-whet Owl lying prone upon a spreading cedar bough just over my head, sound asleep, — pretty, cunning creature!

Only a few owl episodes in those days were vouchsafed me, — a glimpse of a Long-eared Owl one fall in the same swamp, mobbed by crows; a nest of the Great Horned Owl in Canton, with one quaint, fuzzy youngster; one of a Barred Owl in Sharon, deserted before the eggs were laid; another Barred Owl prowling in a Brookline orchard; a Snowy Owl on the Back-Bay marsh one winter; a Short-eared Owl on Thompson's Island, Boston Harbor; a red Screech Owl in the outskirts of Brookline; these treats were about all. But subsequent residence in old Plymouth County, with its many fine groves of tall pines and its lonely swamps, and more recently among the rugged Taconic Mountains of western Connecticut, together with various expeditions north, west, and south, have furnished far more extensive opportunities for acquaintance with owl secrets, especially with those departments, most recondite of all, the nesting of owls and the photographing of them from life.

As I think how delightfully owling and hawking sometimes converge, I love to recall a day when a friend and

I were rounding up our Red-tail nests. It was the twelfth of April, late in the day, and, after some successes, we had driven up a wood road to the borders of a swampy tract of very tall white pines on the borders of Lakeville and Taunton, Massachusetts. On one of the tallest of these trees, nearly eighty feet from the ground, a pair of Red-tails had built, the preceding year, an enormous nest, which we hoped again to find occupied. Here it was, at length, larger, apparently, than ever, and from it fluttered the telltale down. Four resounding blows of a club upon the thick trunk rang out; then was heard a commotion up above, and out flapped a great bird with a big round head. I could hardly believe my eyes. It was not the expected Red-tail, but a Great Horned Owl! And there were the white egg-shells under the tree, which, with spattered droppings in a circle around the base, betokened the presence of young.

Neither of us could ascend the tree, but my companion mounted the next one, which had limbs, some eighty feet, whence he could see the young owls huddled together. Meanwhile the mother owl — for only one appeared — gave a most interesting entertainment. She flew uneasily from tree to tree, sometimes going off for quite a flight, to return in a circle to the same spot. Keeping for the most part about a gunshot away, she occasionally came quite near, sometimes balancing for a moment on the tip-top twig of a tall pine, until it settled down beneath her weight.

It was an entertainment of sound, as well as of sight. Conspicuous above the hubbub of the mobbing crows came the impressive sepulchral tones of the owl. Sometimes it was a single hoot, — "Whoo-o;" again it was two of these notes, repeated rather deliberately; then it would be one prolonged note and two quicker and shorter, as heard from the mountain. Another frequent note was a single soft cooing sound,

quite dove-like, — "oo-o-o-o," — with no aspirate quality. Still another was the guttural, laughter-like cry, — "waugh-whoo-o," — more like the sounds uttered by the Barred Owl than any of the other notes. Comparing the cries of these allied species, aside from the hooting of the Barred Owl being more prolonged, the tones of the latter are sharp and metallic, startling in their resonant qualities, while those of the Great Horned Owl are rich, deep, and mellow, sounding much softer close at hand than those of the other, yet audible at a great distance.

A week later I conducted to this nest another friend who, aided with climbing-irons, managed to ascend the tree. Two downy young occupied the nest, and they were in no immediate danger of starvation, for three rabbits and a mouse, partly eaten, remained piled up on the edge of the nest for their support. This time it was cloudy, and the old owl departed while we were yet some distance off, and did not again show herself. A month later the young could be seen roosting out on the branches near the nest. A miscreant, who noted my visits to this spot, shot the owlets, and had the audacity to try to sell them to me to mount!

The Great Horned Owl is found in scattered pairs in this region, but the Barred Owl is rather more common. In western New England, however, this order is reversed. Here, as in Plymouth County, the Great Horned Owl is apt to use the abandoned nests of the Red-tailed Hawk, which, in this case, are almost invariably in chestnuts or oaks, while there they are as regularly in pines. In western New England the owl also nests in the hemlock tracts on the mountains, probably using any old nest of squirrel or crow.

The owls are all early breeders, and the Barred Owl comes in as a close second to the Great Horned. Though these two species are often confounded under the common title of

"Hoot Owl," they are entirely distinct. The Barred Owl is a trifle the smaller, lacking the conspicuous ear-tufts or "horns" of the other, with dark iris instead of yellow, and plumage very differently shaded and marked. Its eggs are laid by, or soon after, the middle of March. Both kinds are quite tenacious of a locality, unless disturbed, but the Barred Owl is, I think, the more so. One can find a pair of them in the same woods year after year, though the nest may have been repeatedly plundered, or one of the birds killed. In the latter case the survivor secures a new mate and maintains the family estate and traditions.

The Great Horned Owl does not often now, in southern New England, nest in hollow trees, but the Barred Owls prefer such a location, if indeed they can find a hollow large enough in our much-devastated forests. If they cannot, they usually patch up some old affair of hawks' or squirrels' construction, generally in a tall pine in a thick, dark grove. Slovenliness is inbred in owl nature. They do whatever is easiest, and it is easier to lay the eggs in the bottom of a hollow on the soft decayed wood than even to fix up a squirrels' nest.

For some years a pair of Barred Owls nested in the cavity of an oak where a branch had been torn off only twelve feet from the ground and the wood had rotted out. This was in a strip of mixed woodland, just back of the main street of the pleasant little village of North Middleboro. I used to hear the owls hooting, but somehow could never find their home, though I scoured the whole region. But one bright afternoon, the eleventh of April, as I was up a tall pine examining the nest of a Red-shouldered Hawk, I heard the prolonged hooting of the Barred Owl. Starting in search, I happened to pass the hollow tree, and thoughtlessly gave it a kick. Such a thundering, scrambling, whirring sound issued

from within the old shell, that in my surprise I almost fell over. An absurd monkeyish face appeared at the entrance, and away went the great brown creature that I was in search of. Scrambling up, I could just reach the three eggs at the bottom of the hollow. They were very dirty, being advanced in incubation, and were stained with blood from the claws of the predacious bird.

This enticing nest recently nearly caused the death of a friend, an ardent ornithologist, to whom I had revealed the owl's secret. Reaching in to get an egg, he slipped, and, his arm becoming wedged in the bottom of the narrow slit, he hung there alone for an indefinite period, no one responding to his cries for help. Finally the arm became disengaged, and he fell exhausted to the ground.

This pair of owls were always loquacious, and would sometimes "talk back" to a human intruder hidden near the nest. Our conversations of "whoo-whoos" have afforded me the rarest amusement. The female was the one glib of tongue, and she would launch out on splendid flights of eloquence in reply to my inquiries as "to-whoo" she was and "who's who."

A favorite haunt of this species is in groves of tall pines. In one such grove of about ten acres in the town of Lakeville, a pair were for years domiciled. I first discovered them by hearing of a farmer who the previous year had discovered a large young owl that had fallen from the nest. Under his guidance I found the tree, but, as we reached it, I noticed another platform of sticks fifty feet up a neighboring pine. Two things about it were significant, — a large piece of gray down clung to one of the sticks, and from the nest protruded a brown stubby thing that I felt sure was the owl's tail. Blows on the trunk of the tree failed to produce any movement above. My companion was sceptical as I began the

YOUNG BARRED OWL FROM NESTING HOLLOW SHOWN IN PRECEDING PICTURE

ascent; but when I was fifteen feet up, silently and hurriedly the owl left the nest and went out of sight to the other side of the grove.

At last I was up the dizzy height, and before me lay an old squirrels' nest, an aggregation of sticks and leaves, the top of which the new occupants had hollowed out quite deeply. Here in a soft bed of leaves and owl-down were three eggs, — the usual complement of this species, though it is often but two, — white, as are all owls' eggs, nearly spherical, and about the size of eggs of domestic fowl. Though it was "April Fools' Day," the owl had not been able to deceive me and prevent the discovery of her secret.

These eggs were appropriated for purposes which I considered more important than those of the owl. Two weeks later, to a day, on a bright morning, I was gazing upward under that tree, looking in vain for the stubby tail. But there it was on the last year's nest, in a very slender pine, at about the same elevation. Backing off to see the owl move, while the farmer knocked vigorously at her tree door, at length I observed her very slowly raise her solemn face above the edge of the nest, and, with fixed gaze, try to stare me out of countenance. This time she was even tamer than before. I stopped climbing only when my head was just below the level of the nest. There was the brown barred tail projecting within easy reach. Why not catch the owl? But the thought of a struggle in the tree-top with the great raptor's beak and claws forbade.

Probably never again shall I witness at such close quarters the scramble of a large owl from the nest, for this tameness is unique in my experience. First she rose to her feet with a quick start, and almost simultaneously leaped into the air, spreading her wings as she did so. The branches were rather thick, though there was an opening, and the owl in her

excitement struck her wings against the obstruction, almost falling back. With owls, as with men, "haste makes waste." She had but two eggs, and the body of a mouse lay in the larder, as provision, doubtless, for the mid-day repast. This time, as I approached, the husband and father was on guard near the nest. He was not as brave as his mate, — the usual story among raptorial birds, — and flitted on ahead, a few rods at a time, alighting high up in the pines, back toward me, then facing around to stare and "whoo" his usual interrogatory.

Another pair of similar habits resorted to a grove of specially large pines just out of Scotland village, in the town of Bridgewater. My first acquaintance with them was made one ninth of March, when I saw a tail projecting from a nest, sixty-six feet from the ground, and at one blow on the trunk drove off the owl, evidently preparing to lay. Though robbed of their eggs every year by a friend of mine, the pair remained faithful in their attachment to this fine grove, and probably raised a brood from their second laying each year. Once the second set of eggs was discovered in an open hollow on the top of a dead stump. That time they had three eggs, though two is usually all they can produce at the second attempt.

It is not true that the large owls nest only in the deep forests. They prefer, indeed, a very retired location, but in many sections such cannot be found. So, as a matter of fact, they are likely to select some grove of old, large timber on the outskirts of any rather lonely farm. Of the two species already mentioned, the Barred Owl seems to be the less retiring in haunts and habits.

It is easy to remember what owls one is likely to find nesting in New England. There are two large ones, two medium, and two small. The two big ones have just been dealt with,

and we will now consider the two medium-sized fellows, but only briefly, as I have not been able, as yet, to photograph them in the East. They are the Long-eared and Short-eared Owls. The latter is a bird of the open marshes, particularly on the seacoast, and is not at all plenty, save as a migrant. I have never seen its nest in New England, though it is known to breed at places where I have been, such as Martha's Vineyard and Chatham. But in autumn I have often flushed it singly from marshes or bushy tracts along the coast, and sometimes inland.

The Long-eared Owl is much more common and breeds regularly in pineries and cedar swamps, but it is so retiring that it is largely overlooked. Few naturalists have ever heard its hooting. Early one morning, years ago, I heard a long-drawn, wailing cry, twice or thrice repeated, that seemed to proceed from a cedar swamp, near the Weld farm, West Roxbury, Massachusetts. Investigation revealed a Long-eared Owl roosting in the dense cedars, the probable author of the sounds. In such situations I have often found them, and there they sometimes breed, as, indeed, they did in this particular swamp, with the Night Herons, though they often, perhaps usually in New England, choose tall pines, contenting themselves with an old nest.

No owl's nest, save that of the Screech Owl, perhaps, is harder to find. The reason is that the bird usually can neither be seen from the ground nor made to fly. As there are hundreds of old nests in the evergreen groves and swamps, it is impossible for the searcher to climb them all, and thus he may pass under the brooding owl without knowing it. A friend of mine, traversing a grove through which I had often gone, happened to notice on one of the old squirrels' nests a clinging fragment of gray down. He could start nothing, but finally climbed the tree, and when close up to the nest,

some forty feet from the ground, he was rewarded by seeing a Long-eared Owl reluctantly leave, disclosing five downy owlets.

A similar incident gave me a delightful experience. Camping on an islet in Lake Winnepesaukee early one June, I landed one morning on Bear Island and explored a tract of large trees, mostly hemlocks. Halfway up one of the largest of the latter I soon espied a bulky nest of sticks, and under it white egg-shells and droppings. Presently I was seated astride an adjoining branch, watching with eager interest the four half-grown owlets of this species that stood up in the nest and with bristling feathers, angry hisses, and snappings of their beaks menaced their unwelcome visitor. Suddenly the mother appeared on the scene. Seldom have I heard such an outcry from a bird throat. She hopped or flitted uneasily from branch to branch only about a dozen feet from me, mewing like a cat, wailing like a lynx, fairly screaming with fear and indignation, and as an interlude snapping her bill so rapidly as to suggest the roll of a watchman's rattle. Father Owl allowed me only fleeting glimpses of himself at a respectful distance, as he approached to assist his agonized mate, only to retreat as his scant courage was exhausted. This continued as long as I remained in the tree, about half an hour.

Minded to have a pet or two, I returned to camp for a basket. One of the young owls fell from the nest as I started down, and I put it on a stub for safety from prowlers. When I returned in the afternoon, the youngster on the stub had disappeared, as well as one from the nest. The female was now as shy as she had been bold, only barely venturing within sight. Curious to know whither the parents had transported their young, I climbed to every nest I could discover within a considerable radius, numbering not a few, but all in vain.

ADULT SCREECH OWL. HIDING POSE

The remaining young I carried home with me. Fed on raw meat, they grew up and made interesting pets.

There remain now the two little fellows — the Screech and the Saw-whet or Acadian Owls — for us as "owlers" to consider. The tremulous hooting of the Screech Owl is still a common sound in rural New England, and is even heard in towns and villages. I love to sit on my piazza of a moonlight night in autumn and be serenaded by one of the little fellows from a Norway spruce near by. But though they be ever so common, it is seldom that one is seen. Most often

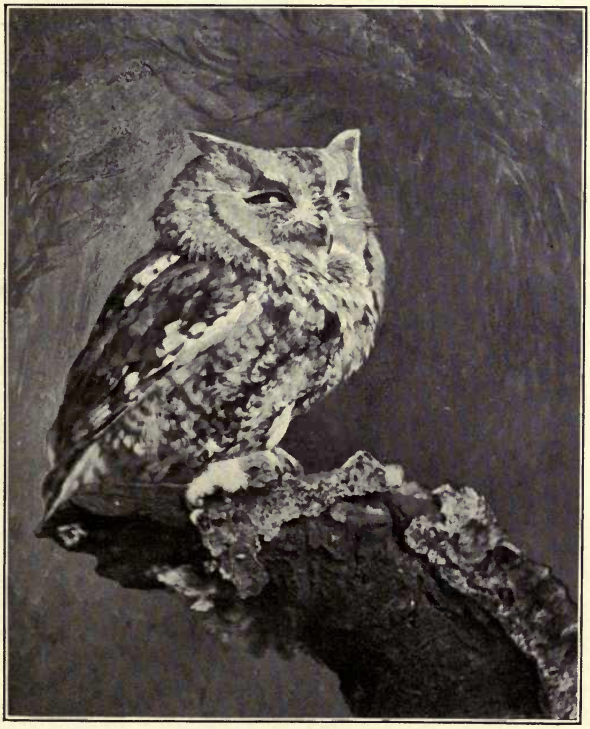
I see them at dusk, when just out of the hole for the nightly hunt, perched on a tree by the roadside or in the orchard. One afternoon in early spring I was driving home at dusk, when, hearing one of these owls, I stopped to listen. The sound came from somewhere close at hand, but for some time I could not locate it, until finally, looking directly up, there I saw the little rogue within a few feet of me, peering down and hooting merrily at me, as though in friendly ridicule.

Now and then I succeed in ferreting them out, especially in the winter, by looking for their disgorged pellets under holes in trees, in orchards particularly. These are owls' "at home" cards. The little dignitary will very likely be found asleep within, and can usually be pulled out unresisting. Often he will feign death and lie perfectly limp, with eyes half-closed. But, if not watched, he will suddenly come to life, and be off.

It is wonderfully hard to find the nest, considering that the little owl is so common. I have actually found more nests of the scarcer and wilder Great Horned Owl than of our tame little friend that abounds all about us. The eggs are laid on the rotten wood at the bottom of a tree-hollow, wherever a suitable one is found. It may even be right in the door-yard, in a shade-tree on the village or even city street, or in the orchard, as well as in the groves or forests. There the brooding owl sits like a statue, and nothing on earth will move her, but force. Moreover she is careful in nesting-time not to betray the location by droppings under her door. When the young are hatched, the parents will bring food, beginning at dusk, and this will sometimes reveal the secret. A brood were raised every year in a lofty hole of a great elm in Bedford, Massachusetts, just over the front door of the house, and I greatly enjoyed the sight when the owls

issued forth each evening to receive food and practise flying. One of them fluttered down one night and gave us the privilege of a closer inspection.

Sometimes one will happen upon a Screech Owls' nest by some fortunate chance. Two boys were walking out one afternoon, early in May. Happening to notice a Flickers' hole in a low stub out in a field, one of them climbed up, put in his hand, and pulled out an unresisting Screech Owl. They carried it home and tried to feed it on corn, — which was as reasonable as for themselves to eat hay! After three



SCREECH OWL. "COMING TO LIFE"

days one of them brought the owl to my home in a paper bag. It was evening, and I had just returned from a drive. I saw from the worn plumage of the bird that she was a mother. The boy protested that there was nothing else in the hole, but I knew better. Next day I had him show me the place.

As I climbed the stub, I detected the odor of decay. "Poor little things," I thought; "starved!" However, I reached in, and instantly something seized the end of one of my fingers, and I drew out a puny, downy little owlet, hanging on for dear life. Again I put in my hand, and had another "bite." This I kept up till I had the whole brood of six. Down at the very bottom were six or eight mice which the mother had brought them, now badly decayed. The owlets were too young to tear them, and evidently the father had left his motherless children to their fate.

Taking them home, I fed them, and put them in a box with their mother. Meat which I left was evidently fed to them all each night by the old bird. After a few nights she escaped, and the young were again motherless. One puny little runt died, but the rest flourished and made very interesting pets, which I photographed from time to time in their various stages. One of them had one eye smaller than the other, a deformity which I also observed in one other Screech Owl. Two escaped and another died, but two of them are yet alive and well, after three years of captivity.

About the only way, ordinarily, of solving the Screech Owl's nesting secret is to peer into every likely tree-hollow, and now and then one will be rewarded. One day, the thirteenth of April, I glanced into a low hole in an apple-tree. Two bright eyes glowed like coals at the bottom, and at length I could make out the owl shrinking over on her side, and disclosing three eggs, about the size of those of pigeons.

TWO OF THE YOUNG SCREECH OWLS IN FIRST PLUMAGE

On the twenty-seventh of the same month I was in a swampy tract of large timber, in which were many hollows. It was impossible to climb to most of them, but a Saw-whet Owl had been "whetting" nightly in these woods, and I was on the lookout. Finally I saw a rather large round hole in an oak, twenty feet up, that looked so especially inviting that I climbed and looked in. There was no Saw-whet, but on the bottom, less than a foot from the entrance, sat a Screech Owl, in the gray phase of plumage. She made not the slightest motion or resistance as I drew her out, and examined her five eggs. All the time she feigned death, and, when placed back in the nest, she went on with her task as if nothing had happened.

Though I did not at this time see anything of the Saw-whet, I was still exulting over a discovery made shortly

before, on the eighteenth of April. I had casually met this owl in my rambles, but never had learned the secret of its nesting, which is a rare occurrence in southern New England. This day, searching for hawks' nests in the pine woods, I came to a clearing in which stood near together two solitary dead pine stubs, in one of which were several holes made by the Flicker. Arriving beneath these holes, I noticed some sort of excrescence projecting from the stub, partly around on the other side, about fifteen feet up, and stepped to where it could be better viewed. My heart almost stopped beating! A round disk filled one of the woodpecker cavities. A pair of tiny yellow eyes gazed fixedly upon me. It was no ordinary sight; an owl, but no common Screech Owl. It had no ear-tufts, and was much smaller, — the Saw-whet or Acadian Owl!

There is no telling how long I stood transfixed watching the owl, and the owl, equally motionless, watched me. But the owl was victor, for an aching neck at length interrupted my gaze. Then I lay down on the dry leaves, and, in an easier posture, continued to watch. All the while the owl stared fixedly, and now and then blinked. The sun shone strong and hot, and the bird of night was right in the glare. Sometimes it would close its eyes, and appear asleep. But, at the slightest movement on my part, the yellow orbs would instantly open. Finally the little creature, thinking me harmless, slid back into her cool and shady retreat within the stub.

I tried the effect of a slight noise at the foot of the tree. Up popped the little round head. A gentle kick on the stub made her come part way out of the hole, ready to fly; so I carefully retreated a few paces. The owl watched me awhile, and then withdrew, appearing again as I approached to see if there were any droppings under the hole. There was nothing

but a small spatter of dung and a single feather nearly covered with dead leaves. Certainly it would have been difficult to locate the bird above by any telltale signs.

For fear that the owl might desert, in case she had not laid her eggs, and not knowing then the usual date for that event, I decided to ascertain this from the books before further disturbing her. Leaving her to disappear down the hole as I retired, I returned home. The scant references to the breeding of this owl gave it as occurring in early April.

It was Saturday, and, not daring to wait till Monday, at ten o'clock in the evening I drove off with my wife, like a pair of owls ourselves, after the other owl. With lighted lantern I left the team, and stumbled off into the woods. After some blundering, — for things looked very differently in the woods by lamp-light, — I struck the right path, and a half-mile tramp brought me to the stub. The little head appeared, as before. At once I set the lantern down, and began to climb. Out flitted the silent owl, off to the edge of the woods, to alight there.

I was soon at the hole, and, holding on by the right arm, I thrust in the left, which had been bared. At first the hole seemed too deep for me to reach the bottom, and foolishly, I had brought no knife. With determination I squeezed in the poor member, till it was almost bleeding from contact with the rough wood. Then came a sort of electric thrill, as the finger tips came in contact with some smooth, round objects. It seemed impossible to grasp them, but at length, by even more painful forcing, I managed to insert fingers under one egg, and draw it out. How many were there was the next question. The bird is said to lay from three to seven. Proceeding after the same manner, I at length had five, and no further fumbling could discover more. I could see in the dim light that they were of a dull white color, quite round, and

about the size of the eggs of the Flicker or of the Mourning Dove.

Meanwhile the owl had returned, and was perched on the adjacent stub, some ten feet away, silently watching me, without exhibiting any token of impatience or anger. Never do I remember a more weird experience. After eleven o'clock on an inky night, up a tree in lonely woods, the lantern below throwing long sombre shadows, and the spectre-like owl watching me with glowing yellow eyes. I thoroughly enjoyed the ghostly outlook, but it was late, and I descended. At once the owl flew back into the hole. A parting tap brought the disk-like face to the opening again. As I withdrew, I turned back just in time to see the little creature sink back into her domicile. Two weeks later I found her there, not a whit discouraged, incubating another set of four eggs.

Since then I have discovered many more "owl secrets," but not one has given me more unalloyed delight than the revelation of that midnight vigil on the lonely forest stub under the glare of the yellow orbs of the smallest of the owls.

THE SCREECH OWL AND HER CHILDREN

"STARED OFF IN SUCH AN INTERESTED AND SPIRITED ATTITUDE"

CHAPTER XVII

ADVENTURES WITH GREAT HORNED OWLS

O, when the night falls, and roosts the fowl,
Then, then is the reign of the hornèd owl.

CORNWALL.

I AM free to confess that no other bird gives me the same thrill of ecstasy as the Great Horned Owl in its native forests. Savage and destructive though it is, there is a majesty in the appearance and character of the splendid creature which compels admiration. Owing to its intractable wildness and secluded haunts, there is no bird more difficult to observe and know. Hardy above all our birds, it makes or selects a great nest in the most inaccessible woodland

tracts, often in the heart of some great swamp or on a wild mountain-side, and lays its large white eggs — usually but two — in the bitterest winter weather, usually the latter part of February, or by the very first of March. From boyhood my feeling has been that it was a supreme triumph of an ornithologist's field-work to trace out the great feathered tiger to its lair, and in particular to discover its nest. And when came the era of hunting birds with a camera, my highest ideal of attaining the dizzy pinnacle of success was to be able to photograph the Great Horned Owl, wild and free, by or upon its nest.

How vividly I recall the excitement of the discovery of my first Great Horned Owl's eggs. It was in a wild region of extensive pine swamps in southeastern Massachusetts. A certain farmer for thirty years back had heard the hootings of a pair of these owls from a lonely swamp, where there still remained a rare tract of virgin timber. I asked him to try and locate them for me that winter by their hootings, so that I might find their nest in the spring.

The time came, at length, for the hunt. It was the eighth of March, a fine bright day. Early in the morning I drove the eight miles over rough, frozen roads, through a country of pine tracts and cedar swamps, to the retired farm. The owner told me that lumbermen had been cutting off the old swamp, but that the owls had hooted frequently in another tract of woods in the opposite direction, where he could often hear the crows mobbing them.

Taking him as guide, we struck into these woods, which consisted of tall pines and deciduous timber on swampy land, with considerable undergrowth of bushes and horse-briars. Our course was well taken, for we had not gone a half-mile before a Great Horned Owl flapped majestically out from a tree before us, scaled down toward the ground, and soared

off just over the tops of the bushes. There was no nest here, so we kept on toward a clump of large pines which we could just see. When we came within gunshot of it, out flew an even larger owl, — the female. I hurried forward, and saw, some forty feet up a yellow pine, a great nest of sticks, which must have measured a yard or more across. From its edges, as well as from neighboring limbs and twigs, bits of tawny yellowish down were fluttering in the breeze. At last my long-cherished desire was to be gratified; I had found the nest of the Great Horned Owl. Somehow the place had a familiar look, and it suddenly came to me that this nest was one which I had found the season before, occupied by a pair of Red-tailed Hawks; we had approached it from a new direction.

The tree was nearly limbless, and in my eagerness I was in such haste that, when I reached the first limb, I was considerably winded. A moment's rest, and then at it again, and I was soon there. The great nest was quite shallow, and on the comfortable lining of bark, sprays of pine foliage, owl-down, and feathers lay the two great round white eggs. Meanwhile the mother owl returned. She alighted upon the dead limb of an enormous pine, fully one hundred feet from the ground, where she stood majestically outlined against the blue sky. At once a flock of crows discovered her, and began to swoop, cawing excitedly. The owl would dodge, snap her bill with a loud clicking sound, and now and then utter an angry "whoo-whoo," her ear-tufts erected and her yellow eyes blazing with indignation. Seldom have I felt more delighted and exultant than while lingering in that tree-top in the breeze and sunshine of that splendid morning of March, with the Great Horned Owl, her nest and eggs before me. That same season also it was my good fortune to find two other nests of this owl, all in last season's nests of Red-tailed Hawks!

The time came when, becoming more skilled in the handling of the camera, I determined, if it were possible, to photograph the wary owl on or by her nest, and attain the crowning triumph of camera-hunting, in the mastering of difficulties almost insuperable. The first thing was to find a nest, but it seemed that I must suffer defeat at this initial stage. After many long, hard tramps I found one, about the middle of April. It was in a lofty fork of a very tall chestnut tree, as usual, an old nest of the Red-tail, which had nearly all crumbled away, leaving only a very precarious perch for the one owlet of considerable size and its most wary mother. The latter was so exceedingly shy that it was only with the greatest difficulty that I could come even within sight of the nest before she flew. Nor would she return as long as I remained anywhere in the vicinity. The case was absolutely hopeless.

It took four years' tramping to find another nest of the Great Horned Owl. Then, on the ninth of March, a rainy day, I started to explore a large wild timber-tract on the sides and top of a mountain in western Connecticut where owls had been heard to hoot. Year after year I had climbed and tramped this mountain in vain, so that I had no especial hope of success. About halfway up, growing at the foot of a rather steep ledge, was a massive rock oak, in a fork of which, about sixty feet up, had been for years a large hawks' nest, which I always examined. The season before, a pair of Red-tails had occupied it. I visited it this time, on the way, as a matter of course.

As I caught sight of the nest through the trees, my heart gave an exultant bound. It had evidently been rebuilt, and two knobs projected from it, outlined against the sky. They were the ear-tufts of a Great Horned Owl! I was at least two gunshots from the nest, but the big owl saw me, and stood up, ready to fly. To photograph in the rain, was, of

course, impossible, and I quietly withdrew to devise a future plan of attack.

The situation of the nest was quite favorable. Though the massive tree, with its rough, scaly bark, was almost unclimb-

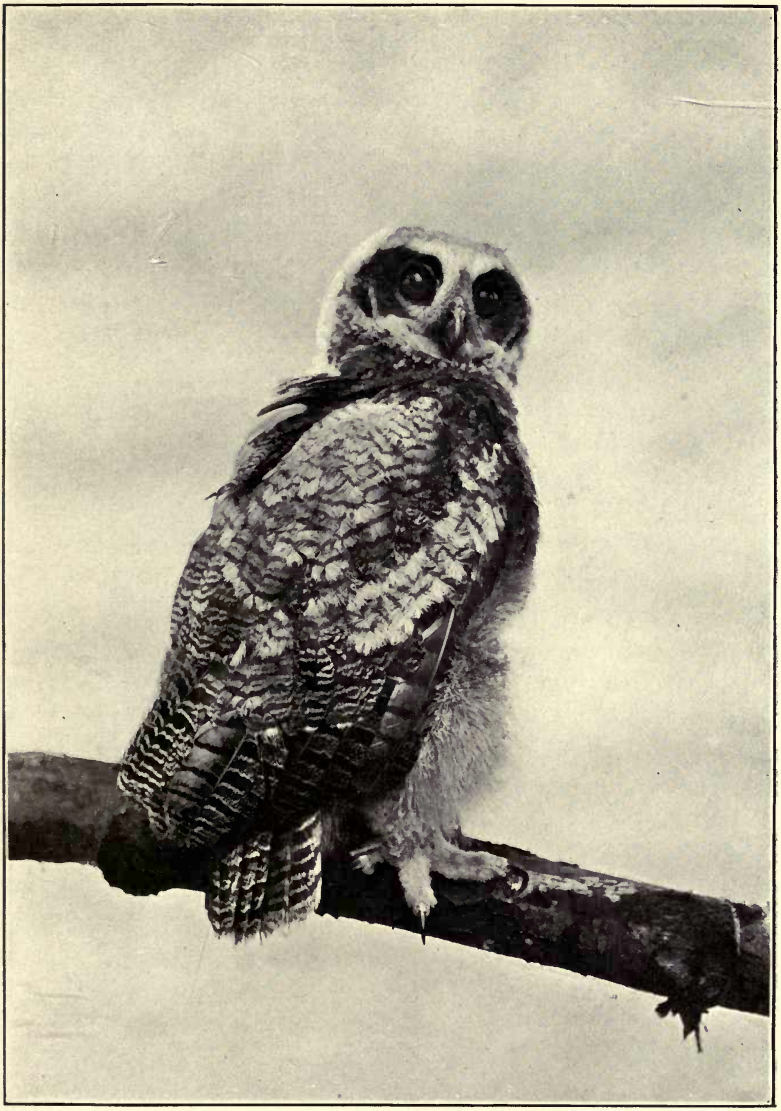
VIEW OF THE GREAT HORNED OWL ON HER NEST

able, from the ledge above one was practically halfway up, and thence grew more slender trees, on some of which one could climb to within fifteen feet of the nest. There one might screw up a camera, and "pull the string" on the owl from a distance. She might also be photographed from the ground as she stood up in the nest, or looked over the edge.

The first problem was how to gain a close approach without being seen by the watchful owl. Studying upon this, the thought came to me of an elderly man in town who for years had carried a faded brown umbrella almost the exact color of the dead leaves in the woods. For a consideration, said umbrella presently became my property. A strip of brown cambric suspended from the edge of its circumference transformed it into a portable tent. Trimmed with a few hemlock sprays and dead oak leaves, the structure was almost invisible in the woods.

Three days later I tried it. Nearly an hour was consumed in sneaking up to the nest. Without the rustling of a leaf or the crackling of a twig I had reached the nearest point, and there sat the brooding owl, her head showing above the nest. Carefully I set the camera up on the shortened tripod, behind the umbrella, and then made timed exposures upon the motionless bird. This done, I would fain catch a snap-shot as she stood up to fly. So I made ready, and, bulb in hand, rustled the leaves. No response. Now I knocked on a tree; the owl did not stir. And so it went till I shouted, and then stood out in plain sight. The owl moved not so much as an ear-tuft. Her eyes were half-opened. Was she dead and frozen, or asleep, or what?

The thought now occurred to me that, since the owl was so impassive, perhaps I could climb the neighboring tree without alarming her. So buckling on the climbers, with the camera slung over my shoulder, I began the ascent, feeling almost certain that she would fly. But there she sat, and soon I was on a level with the nest, only twenty feet from the object of my desires. In order to be sure of a good picture, of sufficient size, it was necessary to use the single long-focus lens of my doublet, and hence to set up the camera and focus. I expected to see the owl leave as soon as I began to



"WHEN IT WAS ABOUT TWO MONTHS OLD"

do this, but she did not. Then everything seemed to go wrong; the apparatus was not in perfect order, my footing was precarious, and the wind was blowing. For over an hour I fussed with the screw-bolt, clamps, and camera. At last it was fixed; I made four exposures, and should have descended from the tree without alarming her had I not maintained a shouted conversation with my companion who had been hiding at a distance, which finally caused her to fly and reveal her eggs. The vigil in the dark-room brought four good pictures. But the sun had so glanced on the owl's back as to make her appear almost white, and I decided that on an overcast day I could do better work. So I made another trip with a companion, walking boldly up with him to the tree, climbing, and at my leisure securing a splendid series of pictures. When I wanted to photograph the eggs, my friend had to throw stones quite a while before the owl would fly.

From time to time I visited the nest again. The young were safely hatched in the early part of April. From now on the old bird became more and more shy, until one could not approach anywhere near her. On the eighteenth of the month, when the downy owlets were strong enough to sit up, I photographed them. It was a windy day, when furious gusts from the northwest made the tree on which I was bend like a reed, and obliged me to hug it, and hang on for dear life. I also succeeded in photographing the old owl several times, as she returned to her young, by screwing the camera up in a tree, attaching a two hundred-yard spool of black linen thread to the shutter, and from my place of concealment farther up the mountain, lying behind a fallen trunk for nearly an hour at a time, pulling the end of the thread, as the owl returned to her accustomed branch before entering the nest.

Two days later, happy over the results of hunting with the camera this prince among birds, I started off for southern Florida. A friend kindly took for me from the nest one of the young owls, about the tenth of May, when they were

NEST AND EGGS OF THE GREAT HORNED OWL

nearly ready to fly, and had climbed out on the branches. Soon after my return I photographed it, on the first of June, when it was about two months old.

Though this particular mother owl did not make any attack, I know of various instances when they have done so. One was that same season, the last of March, when a companion of many of my owl-hunts climbed to the nest of a Great Horned Owl — one of my old Red-tail nests of former years, in a large white pine. The young were

just hatching, but the owl flew as he approached. When he was halfway up the tree the owl swooped from behind and struck him a terrible blow with her talons, tearing his scalp quite badly. After this she kept her distance.

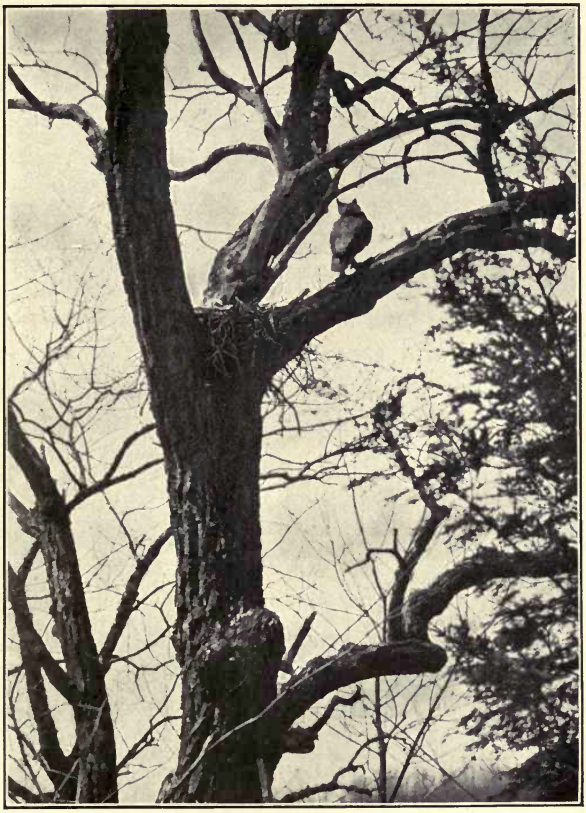
"THE YOUNG WERE SAFELY HATCHED"

The Great Horned Owls aforementioned next year had abandoned their old nesting-site. A sawmill had been located on that side of the mountain, and what I feared had indeed happened. Climbing and wading laboriously through the deep snow early in March, I stood, perspiring and regretful, gazing upon the stump of the ancient rock oak which had held far aloft the great nest of sticks in which those splendid owls had reared their young. Why could not that avaricious lumber company have realized that that was an *owl-tree?*

What sane person would dare deliberately "to break up" a pair of Great Horned Owls, above all birds? But people are not all like me.

There was nothing to do but begin the search anew, and for days and days I vainly explored the cold and silent wintry woods. Meanwhile, all unknown to me, a dozen miles away, another man was in the woods. He was not looking for owls, but vigorously wielding the axe that cold first day of blustering March. The fierce winter of 1903–04 showed no sign of abatement; everything was locked in ice and snow. As he worked, he noticed that a flock of crows kept up a great racket in a neighboring grove of heavy deciduous timber. After a time he decided to go and see what was the trouble. Walking quietly up, he saw the black rascals swooping excitedly about a certain chestnut tree. In its top fork was a platform of sticks, from which projected a dark mass which ended in two peculiar knobs. A closer approach revealed two round yellow eyes gazing fixedly down at him. He was a trained woodsman, and knew well what it all meant. The crows were mobbing a Great Horned Owl on its nest. Most men would have shot the owl, but he possessed the instincts of a true naturalist, and preferred to watch it from time to time. After some two weeks it occurred to him that he had promised to write to me should he find anything of interest. So one night, after a day of unremunerative owl-hunting, I received a very welcome letter.

As soon as possible, early on March 19, I started with a youth in my sleigh for the locality, which was some eight miles from my home — the longest eight miles I ever drove. It was uphill all the way, some places at an angle of forty-five degrees. Now it was partly frozen mud or bare rocks, and presently we floundered through a softening drift, in depth up to the horse's ears. Eight such miles was a morning's



"AS SHE RETURNED TO HER YOUNG"

drive. It was mainly through woods, and as I neared at last the locality described I heard crows and saw a number of them flying about over a grove not far off to the left of the road. I thought that this must be the place, and sure enough it was.

Leaving the horse at the home of my informant, we all followed the wood-path, through the deep snow, to the owl-preserve. The crows were still excited, but one of them gave

a warning caw as it saw us, and away they all went. The owl sat upon her nest, forty feet from the ground, stolidly gazing down at the approaching company, making no move as we surrounded the tree, and as I took photographs of her from the ground.

The question then was as to how near her she would let me climb with the camera. Examining the surrounding trees, I selected a black birch about eighteen feet away, — south, toward the light, — and likely to afford the best opportunity. The climbers were buckled on, camera strapped over the shoulder, and I began the ascent, quietly, pausing now and then to see if the owl was getting alarmed. She had been facing east, but now she turned her head sidewise toward me, her body crouched down into the nest as far as possible. It was a shrinking attitude, and typical of all owls' attempts at concealment, — the feathers drawn closely together so as to look as small as possible, the eyes closed all but a mere slit, the ear-tufts erect, like snags of bark.

As she did not move, I kept on till I was upon a level with the nest. Now, would she let me work and rig the camera? Everything was favorable except one small branch in the way; I must try to remove it. Very slowly I reached out my hand. The owl shrank back a trifle. Taking the twig, I snapped it as softly and gently as I could. The noise was but slight, yet the owl gave a nervous start, and almost decided to fly. Keeping perfectly still, I did not even withdraw my hand for a couple of minutes, till she seemed reassured. Then I began operations, cautiously and with deliberation in every movement, driving the screw-bolt into the limb, taking my camera from the case, opening it, clamping it to the bolt, adjusting it and focusing under the cloth, — using only the front lens of my doublet, to secure a larger image. A branch was in the way from this spot, so I had to undo everything,

select a spot for the bolt farther out, and do the work all over. It was an hour and a half before I was ready for the exposures, meanwhile suffering from cramps in my feet and legs from their constrained attitudes. The sun was overcast, just enough for soft fine detail with short timed exposures. I took a series of them timed from one to three seconds with the lens at full opening. This being done, I packed my instruments and descended, without starting the owl. I should have liked to see what she was brooding so bravely, but I was afraid that the eggs might become chilled and not hatch.

"HER BODY CROUCHED DOWN INTO THE NEST"

My next visit to the owl's nest was on the sixth of April, this time with my wife. The thaw was well under way, and the condition of the mountain roads something dreadful. The owl was on her nest as before. My purpose now was to set the camera near the nest and make the exposures from a blind with a thread just as she alighted, upon her return. She allowed me to climb the same tree as before, but flew just as I reached the place for the camera, when I called to my companion. On the edge of the nest was part of a rabbit, and snuggled down deep in the middle was a heap of white down, the owl's young.

While setting the camera, I was unlucky enough to tip my carrying-case too far over, and all my plate-holders went scaling down upon the carpet of dead leaves and sticks forty feet below. My feelings may be imagined as I resigned myself to the thought of having had the day's hard drive for nothing. I felt wonderfully better when it was announced that only one of the plate-holders was broken, and that the plates in the rest seemed to be sound. Lowering my thread, one of the holders was fastened on, which I then drew up and inserted in the camera. The latter was duly focused on the nest, and I then attached the thread to the shutter, set for an exposure, dropped the spool end to the ground, and descended.

The place that I selected for our ambush was a thick clump of green mountain laurel, about a hundred yards from the nest. To this spot I carefully laid out the line of thread, made a dry seat of bark and overcoats, and then began the vigil, hardly moving my eyes from the nest, which I could see through an opening in the leaves. For quite a while not a sound broke the stillness. Then a pair of Downy Woodpeckers began to tap on a tree, and, coming near us, to go through their mating antics. Soon after this a Red-shouldered Hawk

set up a powerful screaming on the edge of the grove, and the crows went after him in full chorus, as he beat a retreat. Next we heard quacking and the whistling of wings, as four Black Ducks passed over our heads, just above the tree-tops. After circling a number of times, they alighted over beyond the grove in an overflowed meadow and alder swamp, where they are accustomed to breed.

These sights and sounds of nature diverted our minds, until at the end of forty-five minutes we were startled by a loud, incisive note, which sounded to me like "waup-p," ending in a sort of snap, the whole having a rising inflection. Immediately the great owl glided in, and with an upward swoop alighted on a limb only a few rods from the nest, in plain sight of us. Splendid great bird, she stood two feet high, ear-tufts erect, eyes round and blazing, turning the fine head uneasily from side to side. In about a minute she flew, gliding downward as she left the branch, uttering, just as she started, another "waup-p," which fairly made us jump. Thus she flitted majestically from perch to perch, distrusting the camera and focus-cloth, which certainly made a very conspicuous object up there in the tree-top against the sky. By this time some crows had discovered the owl, and were following her about, swooping at her head now and then with angry caws. The great bird disdained to give them any attention, save that now and then, when one came too close, she snapped her bill angrily.

During one of her flights she alighted very near us. Fearing discovery, we kept perfectly still, and she did not detect us through the branches. Then she flew to a perch nearer to the nest, then farther off, but suddenly she sailed up and alighted on a forked branch close to the nest, when I immediately pulled the thread. The sun was slightly overcast, and I had set the shutter for about a fifth of a second, with the

single, long-focus member of the doublet lens. Though the shutter did not seem to alarm her, she was not quite ready to brave the camera, so she flew, and it was not until the third approach that she actually alighted on the nest and went to brooding. All this had taken her a little over an hour. I did not attempt as yet to change the plate, wishing her to learn that the camera was harmless. She remained seven minutes over her young, and then flew off of her own accord.

Just after her first approach to the nest, her mate for the first time made himself heard, at least by us. At the western edge of the grove, farthest away from roads and farms, he began to hoot, the regular cry of the owl which is usually heard, — "too-whoo-o, whoo, whoo," — soft and mellow in tone, yet audible at a considerable distance. Indeed, while at work during fall, winter, and early spring, my friend who showed me the locality had heard three different owls hooting at once, from as many tracts of woodland. It was noon, and quite bright, with considerable snow in patches on the ground, yet the owl was awake and hooting. For about a quarter of an hour he hooted once or twice a minute.

In the absence of the female owl I ascended the tree again and set the camera. It was nearly another hour before she came back, and twice more I pulled the thread on her when she perched conspicuously near the nest. I believed I had secured some splendid pictures. We reached home at dark, and after supper I hurried to the dark-room. In one case only half the owl was upon the plate, the camera having moved, and in the others the bird was more or less hidden by the branches.

On the fifteenth of April I made the trip again, this time alone. It was quite mild and bright. Only patches of snow-

drifts remained, and the sprinkle of snow which had fallen the night before was fast disappearing. A neighbor's boy went with me to the nest; the owl was on it. I had feared for her safety, as a man had been chopping not far away, and I was afraid that he would discover her. This was one case to show that the faculty of observation is not always desirable! First, now, I wanted a flight picture. So I aimed the reflex camera at the nest and had the boy kick the tree. Off went the owl, northward, as she always did. She was very quick and I too slow, for I got only part of her image on the plate!

"STOOPING OVER TO CARESS HER OWLET"

As before, I set the camera up in the tree; then I dismissed the boy, and hid in my bower, keeping tally on a sheet of paper of all the sights and sounds of nature. This time there was constantly "something doing," and for three hours I was busy. Both owls were hooting and flying about, the crows were excited, Flickers and Hairy Woodpeckers were drumming, drilling their nests, and making love, and there were other happenings. My vigil began four minutes before noon. In thirteen minutes the male owl began his tuneful songs from the same place as before. It took the female forty-six minutes to begin her usual whines, or "waupps." This ushered in her usual performance of "monkeying," until at the end of an hour and twelve minutes she suddenly — before I realized it — had alighted on her nest, and I scored

my next camera-shot. After a vigil of an hour and seven minutes I had another.

If there were any question as to whether such sport is worth while, in answer I would point to the picture of the old owl, every marking of her beautiful plumage distinct, her feathers fluffed out, stooping over to caress her owlet, which is snuggled down behind the piece of rabbit visible on the edge of the nest. If such a picture of such a bird is not thought worth a day's sport in the open air, I do not think much of the sporting blood of one who holds such opinion. The exhilarating drive through the fine woodland and mountain scenery, the bracing air, the excitement of tree-climbing, the lunch with keen appetite in the laurel thicket, the sights of unsuspecting wild creatures, the exciting expectancy through all, — even these, aside from the picture, make a glorious day's outing.

After the second exposure I stole out of the grove without alarming the brooding owl — leaving the plate unchanged — and summoned the youth again to assist me. First I had him climb the owl-tree, slender and partly rotten, to the nest. There was only one owlet, now about the size of a pigeon, covered with white down, save for incipient yellowish feathers on back and wings. With it was a rotten egg which contained a small embryo. Probably it had become chilled, and this episode helps account for the fact that these owls often raise but one owlet. I noticed another thing, too. The nest of sticks, unusually small and rough in the first place, — probably an old nest of a pair of Broad-winged Hawks which breed in these woods, — at each of my succeeding visits was smaller than before, as though it was gradually dropping to pieces. There was now barely enough of it left to hold the owl family and its stock of food, which latter consisted of the hind quarters of a rabbit.

I had the boy bring down the owlet and the egg, while I climbed the neighboring tree for the camera, and then photographed the owl and his incipient brother or sister on the ground. Then the youth replaced the owlet in the nest, and climbed a tree close by, where he photographed the nest and its contents, under my directions.

To finish up this owl business in good shape, one more visit was necessary ere I started on a Southern trip on May second. The week before was stormy and unsettled throughout, save one day when I could not go. Saturday came, the last day of April, — and of grace, — dark and forbidding, with thick fog. It was then or never, so I started with a youth for the nest. Gradually the fog lifted, and the sun came out by the time the long drive was over. The crows were making a tremendous racket. Confident of what I should see, I came in sight of the tree. There was just a mere fragment of the nest left, no owl on it, not even the owlet, nor was the latter

"SQUATTING IN THE LEAVES"

on any branch. I felt terribly chagrined, but began a search for it, hoping that it was not yet devoured by foxes. Good! Here it was on the ground, directly under the nest, squatting in the leaves. First I photographed it just as it lay, then in other surroundings where I placed the angry, snapping little fellow to suit my pleasure. One of these situations was at the entrance of a great hollow in a tree-trunk, which might well have been used as the nest-site by the parents, for this species sometimes uses hollow trees as well as old open nests of hawks and crows.

The next move was to replace the little fellow in the small remnant of nest from which he had fallen, and photograph him from the next tree. Then I screwed up the camera in the old place, and the youth and I went into hiding, hoping that the mother owl would come back. The youth soon got tired of watching for owls, and went sound asleep. Now and then the old owl whined in the distance, but as time dragged on, it was evident that she knew that the young one, now half-grown, and partly feathered, was too old to need brooding. The little fellow, thinking he was unwatched, acted like his own little self. For a while he lay in the sun asleep. His head drooped away over the edge of the nest, and I did not know but he would fall out. Then he stood up and walked about, and stared off in such an interested and spirited attitude that I could not resist the temptation to pull the thread and take his picture. And so the series was complete. Before I left the blind, a Broad-winged Hawk came and stood on a tree near by in a dreamy, contemplative way for about a quarter of an hour, perhaps pondering upon what tree she and her mate had better build their nest.

It was more than a month, after returning from my trip South, before I again visited the locality. Not a single stick of the nest was left in the crotch. I understood now why it

was that five years before I had found a Great Horned Owl brooding an owlet in the bare fork of a tree, where there was nothing but a little dirt left of the nest. A hunter who was with me had seen such things before, and thought that the owl tore down her nest, as the young grew up, to make it less conspicuous. Now I am convinced that it is not done purposely, but is due to the elements and the slovenly habits of the bird in using old rotten nests instead of building for itself.

I also learned of the farther career and tragedy of the owl family. The owlet had again fallen out of the nest, and was mobbed continually by crows. The man who had shown me the nest found the youngster back in the woods on the ground, several hundred yards from the nesting-site. Taking it to his home on an adjoining farm, nearly a half-mile away, he kept it in a chicken-coop, and then let it out, to stay about his yard. In a few days the mother owl heard her little one, which "peeped" somewhat like a chicken. Each night thereafter she brought it food, usually the hind quarters of a rabbit, most of which was found by it in the morning.

After a while it strayed back into the woods, and another man, a neighbor, found it, who brought it to his place, and kept it confined. Each night or early in the morning the devoted mother brought food to her fledgling. One morning, shortly after dawn, she alighted on the ridge-pole of the barn with a rabbit. The farmer had just arisen, and, seeing her, seized his gun, and brought her tumbling to the ground. The savage little orphan he kept in captivity, and finally exchanged it with some one else for a boat. How strange it is, this blood-thirsty instinct in so many men, that makes them eager to kill every wild thing of size, whether of any use to them or not! Sympathetic observation of nature, allied with the fine new sport of camera-hunting, will enforce the appeals of

culture and religion, and help to drive out of man the lingering remnants of savagery. As for myself, I look with intense delight to many owl-haunts in wild forests in all seasons, but particularly to finding the nests of, and above all to the achieving my ideal of photographing from life, the Great Horned Owl.

"THERE SAT THE BROODING OWL, HER HEAD SHOWING ABOVE THE NEST"

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